Master's Theses & Capstone Projects   Education

Fall 2019

Preschool Students Learning from Play Based Learning and Small Group Instruction

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An Action Research Project Presented

in Partial Fulfillment of the Requirements

for the Degree of Master of Education

December 2019

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PRESCHOOL STUDENTS AND DIFFERENT LEARNING STYLES

Table of Contents

PRESCHOOL STUDENTS AND DIFFERENT LEARNING STYLES

Abstract

The purpose of this study is to use two different types or learning and see which one is more effective for preschool students. It seeks to answer this question: Do preschool students learn more effectively from small group instruction or from play-based learning? Preschool is where learning really begins, it is important to have a solid foundation for an educational career, this foundation is built in the preschool setting. Students learn in a variety of ways, hopefully this study helps determine the most effective way for the majority of the students to learn. Play-based learning is a relatively newer concept that not all educators are familiar with, however this concept is something students really seem to enjoy. Group instruction is a type of teaching that has been around for decades and continues to be utilized today. One of the main focuses of preschool education is literacy and math. These are two things students will take with them for the rest of their lives. Teaching these skills and building on them from preschool on up is essential.

PRESCHOOL STUDENTS AND DIFFERENT LEARNING STYLES

Preschool students and different leaning styles,

small group instruction vs play-based learning

Students are spending more and more time using technology-based items as the 21st century continues to take over. The time students are given with technology is not new time that is being added to the school day. This technology time is taking away from play-based time. Play-based time can be considered play-based learning or free play time for students to spend burning off energy. Children under the age of four who are left to play alone rather than using technology will develop better creative thinking and problem-solving skills (Mustafaoğlu, Zirek, Yasacı, & Özdinçler, 2018, p. 243). Students are not getting the opportunities like they used to get because so much time is soaked up by technology. It is so easy for parents to throw a phone or iPad in front of a child and entertain them for hours, however, this is not furthering their education on anything.

Preschool students who have a secure attachment with their teacher have higher reaction time, higher auditory, visual, and visual spatial selectivity (Commodari, 2013, p. 11). As students get older, they likely change learning habits and styles. It is important for preschool teachers to know and understand the best way in which students are able to learn. Play-based learning is a common instruction method used by preschool teachers. Early childhood educators are recognizing more importance in teaching young children in natural environments within the context of play (Hanline, 2001, p. 10). They also use the common most frequently thought of method of general instruction which has demonstrated to be effective. It's not clear which of these two methods of instruction is the most effective. General small group instruction is the most common. Play-based learning is a relatively new concept teachers are starting to implement.

A number of schools and educators are not using play-based learning, nor do they know anything about it. There are a number of individuals including teachers, principals, and superintendents who do not believe in play-based learning. Play is often understood as one of the primary ways to learn in early childhood education, this is not always the case in every setting (Edwards, 2017, p. 4). Social interactions and observational learning can be effective learning environments for early childhood education. Play-based learning can be a very effective way to instruct students while also allowing them the opportunity to be creative on their own. Play-based learning allows students to explore, experiment, and expand on knowledge (Edwards, 2017, p. 4). A block center in a preschool classroom where students are able to build different things with blocks allows students to build on their creativity. This center allows for students to use their own creativity while experimenting with building things. There are also ramps and marbles which students can use to play with different angles and directions. These experiences can be very difficult to teach in small groups without the hands-on play-based instruction.

Meanwhile, general instruction has been used for years and years. General small group instruction has demonstrated its usefulness as it has been used consistently over the past several years. Whole group instruction is a method that is widely accepted in preschool teaching (DiCarlo, Pierce, Baumgartner, Harris, & Ota, 2012, p. 154). There is not anything wrong with general instruction when it is used properly, however there are new ways to do things too so this should not be the only method of instruction utilized. General instruction provides opportunities for students to begin learning in small groups, this is a task that students must master.   General instruction is utilized in a number of different educational areas, specifically higher education. No matter the method of instruction, the early implementation of phonological awareness is key especially with preschool students. Evidence shows high-quality preschool experiences can lead

PRESCHOOL STUDENTS AND DIFFERENT LEARNING STYLES

to better student academic outcomes (Connor, Morrison, & Slominski, 2006, p. 665). These

phonological awareness skills can be taught either through small group instruction or play-based

instruction.

PRESCHOOL STUDENTS AND DIFFERENT LEARNING STYLES

Literature Review

  Preschool is where it all begins. A student's education generally begins in preschool, this is the time when good and bad habits have a tendency to be formed. Good habits can be formed from an early age and carried throughout the student's entire educational career, bad habits can also be formed creating trouble for students and teachers for years to come. One reason for supporting early childhood education is due to the large amount of evidence which supports subjecting students to education experiences when they are young has shown significant impacts on later educational, social, and adult outcomes (Brooks-Gunn, Markman-Pithers, & Rouse, 2016, p. 3). Preschool programs are important as they begin to build the educational foundation which will continue to be built upon for years to come throughout the student's educational career. The quality of a preschool program determines how effective it is, particularly in helping children learn and develop. This also determines whether it's a worthwhile investment or not (Barnett & Frede, 2010, p. 22). It is necessary for preschools to be worthwhile investments as they are the introduction of what is to come educationally for children. Nothing can replace the importance of a good high-quality teacher during a student's formative years (Neuman & Cunningham, 2009, p. 533). Preschool is the framework for future education. It is important to start students off on the right foot. Having good educators at the preschool level is also essential to educational success. Literacy is an ongoing process, is does not begin in kindergarten, everything adults do to support children's literacy counts (Strickland, 2004, p. 86).

  Preschool programs which act like a daycare are not preparing students for kindergarten. These daycare programs are not helpful to kindergarten teachers as they are not working on academics. These programs generally do not have licensed educators assisting on day in and day

out operations. These are some of the important things to look at when searching for the right preschool program. Preschool teachers who help students gain experiences related to primary school by presenting activities that help prepare them can offer worthwhile assistance in the students transition to primary school (Kocyigit, 2014, p. 1873). Experiences in preschool will last with the student for the remainder of their educational career. This is the foundation for many years to come. Connor, Morrison, and Slominski note the importance of a high-quality preschool experience as it leads to stronger student outcomes, specifically children who are at risk for academic underachievement (Connor, Morrison, & Slominski, 2006, p. 665). Interventions made during these high-quality preschool sessions have shown a reduction in referrals to special education and have enhanced the overall educational experience.

Preschools aim to prepare students for school years to come. The foundation teachers are building in preschool includes focusing on math, reading, writing, science, and nature activities. Parents strive for a positive preschool foundation to facilitate interest and success in the preceding school years (McNulty, 2008, p. 49). Academic preschools tend to focus more on school readiness skills and preparing students for specific tasks and activities. Preschools often have a significant amount of formal instruction time where educators are working with students on various tasks either in small groups or large group instruction. However, in preschool there is often unstructured time allowing students freedom to work around the classroom in different centers focusing on different tasks. Unstructured play is very important as it has been linked with better physical health (Harman & Harms, 2017, p. 31). Academic preschool provides a more formal instruction. There are a number of different preschools who combine these two instruction techniques allowing students to engage in different activities and create their own learning habits.

PRESCHOOL STUDENTS AND DIFFERENT LEARNING STYLES

Preschool can be considered the beginning of education for most students. The time parents spend at home working on educational material is helpful for preschool, and preschool is helpful for the rest of the student's life. Parents and teachers need to work together. Parents are the children's first teacher, educators are simply picking up the torch from where parents left off (Anderson, 1998, p. 331). A lot of responsibility is placed on these preschool teachers as they prepare students not only for kindergarten but for the rest of their schooling. Schools can be very influential places, and teachers very influential assets, (Sokatch, 2017, p. 1238). In academic based preschool settings, the overall experience is more structured, while play-based programs do not necessarily follow a specific agenda. There are a number of misconceptions about play-based programs and students just getting to hang out all day. The knowledge learned through these activities cannot be repeated as easily through group instruction.

Play-based learning. Play-based learning can be a foreign concept to some, especially older staff members who have not had much for continuing education, or do not attend professional development. Play-based literacy offers a rational response to the growing expectations placed on children for literacy achievement, these experiences do not necessarily center on formal instruction, they are genuine and meaningful (Klenk, 2001, p. 150). The amount of information children can learn through play is simply remarkable. At this young age there is no better time to allow play-based learning. Children's minds are young, and this allows for a number of fantastic opportunities to explore new ideas. Play is crucial to child development. These key staff members need to know more about play-based learning. These are resources that can be used across the building and district to allow students to explore on their own making connections and memories. There are a number of different topics students can learn from play-based learning. Play-based activities which involves early literacy learning can be part of the

developmental continuum which encourages subsequent literacy (Hanline, 2001, p. 11). Play-based learning offers an opportunity to learn through ways that were not previously thought of, this allows students to be creative and come up with ideas on their own. Teachers should work with other educators and staff to explain the importance of play-based learning to older staff members and administrators who may have been out of the classroom for some time.

        Play based learning and phonological awareness. One of the most important topics in preschool is phonological awareness or literacy. Many children start kindergarten with less than desirable literacy skills (Piasta, 2016, p. 235). Literacy skills include phonological awareness, vocabulary, letter naming, and word manipulation (Hilbert & Eis, 2014, p. 105). Alphabet knowledge is recognized as one of the strongest predictors of later literacy achievement (Jones, Clark, & Reutzel, 2012, p. 81). Play-based learning can also cover phonological awareness and literacy. The idea of exposing young students to literacy at an early age has long lasting benefits. Adults should model good literacy behavior to students/children so they can understand the importance of these skills (Nel, 2000, p. 139). Teacher modeling is one of the best ways to introduce reading strategies to students (Frey & Fisher, 2010, p. 107-108). When children are involved in playing games with adults such as pat-a-cake this exposes them to different language skills which help provide a foundation for future literacy development (Hanline, 2001, p. 10). The earlier a child is exposed to this type of behavior the better! Exposing students to phonemic awareness in the early grades increases the ease with which students acquire important reading skills, (Fleet & Conderman, 2002, p. 242). In a perfect scenario parents would have started exposing students to phonemic awareness exercises prior to coming to preschool. Play offers opportunities for children to interact with books and other print materials, to see other children and adults using print in practical ways, and to build oral language and phonemic awareness

skills (Hanline, 2001, p. 11). These are subjects which could also be taught through small group

instruction however would likely take considerable time to instruct, and even longer for the

student to understand. If this instruction was done in small groups as opposed to play-based the

student would also need to be older to fully understand these topics. Play-based activities lay the

conceptual and experiential foundation for literacy by giving students a chance to develop motor

and visual skills as well as participate in symbolic thinking (Hanline, 2001, p. 11).

Block centers are available to children in almost all early childhood programs (Hanline,

2001, p. 12). Playing in block centers creates a number of different opportunities such as

preparation for writing while focusing on fine motor strength and coordination. It also creates an

environment where children can communicate with one another orally furthering the emergent

literacy process, (Hanline, 2001, p. 12). Another idea of play-based learning could involve

drawing or painting. Scribbling often transitions to writing letters and forming sentences. It is

important to provide time for different types of play, this allows children to advance beyond

simple play and move to more complex play furthering emergent literacy learning, (Hanline,

2001, p. 14). The more time students are allotted for play-based learning the better foundation

they will be able to build, this foundation will be utilized for years to come as there education

continues to grow. This foundation will continue to be expanded upon with other types of play

that are more challenging.

Literacy is not something that is learned overnight, the more exposure and time spent

working on these skills the better, hence why we start as early as we can. Learning through play

continues to be embraced by early childhood educators (Thomas, Warren, DeVries, 2011, p. 70).

There are endless amounts of play-based learning opportunities that can be utilized. There are

plenty of different ways educators can focus a lesson around a student playing while the student

is then allowed to place their own ideas into the play section and take it a step further. This type of learning generally engages the student as they are able to participate in different activities that they enjoy. Games are excellent learning environments, they are interactive, they provide feedback, they grab attention, and they provide an appropriate level of challenge for the students (Denham, Mayben, & Boman, 2016, p. 70).

Literacy is an easy concept to turn into play-based instruction. There are a number of different lessons that can be utilized. Small group instruction works well in a literacy setting, students are provided with more freedom in a play-based literacy setting, however. In a study of kindergartners who were playing in their class grocery store, the children were seen creating grocery lists, making orders for depleted stock, and drawing boldly lettered signs for the shelves (Klenk, 2001, p. 150). These skills acquired during the play-based learning section of the grocery store can easily be transitioned into more in-depth literacy lessons. When students are working on forming grocery lists this is a literacy skill that can easily be continued upon. Observations made by teachers and other educators during play-based learning are often times more valuable than those made under stressful situations such as standardized tests (Klenk, 2001, p. 150). This is a key point as teachers' observations are used for a wide variety of tasks. Play-based learning does not have an ending point per say while standardized tests do. The stressfulness of testing when students know an educator is observing them can cause the student to be nervous which might skew the results of the test. Anxiety disorders are a portion of the most prevalent childhood emotional disorders, approximately 10-21% of children exhibit anxiety disorders (McLoone, Hudson, Rappe, 2006, p. 220). If an educator is observing a student at a play-based situation the student is less likely to be nervous and more likely to just play along. This type of setting is ideal for assessment as the student is relaxed and acting like themselves.

Educators can see how creative students are based on the advancement of the play-based center and the ideas they have generated. If there is any question educators can prompt the student with questions about the scenario to see how they respond.

Play based learning is a new concept. Play is not a singular event, it is a continuum of playful behavior that children engage in based off of the degree of support of interaction (Gerkushenko & Gerkushenko, 2014, p. 2). Older staff members who do not attend professional development sessions or receive continuing education likely do not even know about the benefits of play-based learning. This is really unfortunate as play-based learning can be a fantastic resource to utilize with students especially in the younger grades. Some teachers are also pressured to achieve specific state standards or curriculum and do not feel like they have time for play-based learning. Kindergarten teachers face pressure to make sure students obtain specific literacy standards before proceeding to the next grade (Pyle, Prioletta, Poliszczuk, 2018, p. 117). Kindergarten teachers are often pressured by large class sizes and parents for student to fully prepared for the National Curriculum, which causes kindergarten teachers to teach more formally rather than informally through play (Miller, 1999, p. 58). Play-based learning might not be for everyone, but it is important to give it a chance to see how it goes. Every class is different, and some students might not tolerate the flexibility and freedom of play-based learning.

When allowing a young student to play it might not seem like learning is taking place. It takes time for students to get comfortable with play and the different things they are able to do at each center. The more comfortable they become the better they will be at playing and developing these learning skills we are encouraging. Preschool students who have multiple opportunities for pretend play often advance their cognitive skills (Prairie, 2013, p. 62). It will not be immediately clear that these cognitive skills are being advanced. It takes time to be able

to see improvement throughout play especially in these younger students. Prairie goes on to explain the importance of sociodramatic play as children use play to foster decision making skills and master self-discipline. Children need these skills in order to excel in elementary school and beyond. Prairie continues with sharing the importance of props to be used in play centers and the need for these to be open-ended so children can use their imagination in fulfilling their various uses. Educators and paraeducators should not just stand by and observe while students are playing in these centers, this is a great time for educators to follow the students lead. Educators who participate in play contributes to create a rich and targets literacy practice during the play activity (Pyle et al., 2018, p. 125) . Engaging in play with students helps make it more realistic and educators can ask questions of the student in relation to the specific center to encourage outside of the box thinking. This also helps keep the flow of play going and minimizes distractions.

Ashiabi (2007) conducted a study about play in the preschool classroom and the socioemotional significance and the teacher's role in play. The National Center for Education Statistics asked parents and teachers what five-year-old's should know before kindergarten. Parents placed greater importance on academic skills and classroom practices which were academically oriented, (Ashiabi, 2007, p. 199). Parents also thought students should have knowledge of the alphabet, and the ability to count to 20, teachers were less concerned with this academic knowledge. Play allows students to form and expand their knowledge and skills as they interact with the environment, with others, and on their own (Ashiabi, 2007, p. 200). The freedoms enabled by play allows students to explore a wide variety of different things on their own. Children engage in play because they enjoy what they are doing and they like using their imagination. Play also enhances relationships and students social understanding of different

feelings, another subject that would be very difficult to try and teach through academic instruction. There are a number of different skills students can learn from play, Ashiabi emphasizes the social skills students are able to learn especially when working with another student or in a group of students.

Group instruction. Group instruction has been around for decades, when referring to educating our younger students this type of instruction is the first type that should come to mind as it is the most commonly used. Large group instruction is utilized as the most effective and convenient format of instruction for general content (Ornstein, 1995, p. 104). This approach is effective and prepares students for their future education for years to come. College level courses do not have play-based learning, this is generally a whole group instruction in a lecture style format. Whole group instruction has shown an increase in the sense of community in the classroom setting, it prepares children for the expectations of future classes, and increases student's vocabulary (DiCarlo et al., 2012, p. 154).

During whole-group or small group instruction one of the most important aspects is student's behavior and attention to the educator. Educators should work to connect the instructional activity to other activities through the use of different materials, this helps keep students focused. Research in education has determined that learning is best supported through engaged hand on learning experiences (DiCarlo et al., 2012, p. 157). Acknowledging a student and communicating with individual students during this instruction is important. It is rewarding for the student and helps keep them engaged, it's also likely to foster further engagement not only from this student but also from other students. When students are engaged in learning, they are more likely to participate in offering up answers to specific questions. Increasing students' space during whole group instruction has been found to foster better attention from students

(DiCarlo et al., 2012, p. 158). The use of sit spots (small Velcro circles which attach to the carpet indicating a specific place for a student to sit) in a small group instruction can be very beneficial so each student knows what space theirs is and does not impose on others space.

If other educators are in the room during instruction, they should assist with the instruction rather than prepare for other activities as this can be distracting behavior for students who are having difficulty staying engaged in the lesson (DiCarlo et al., 2012, p. 157). The use of multiple shorter whole-group instruction sessions can be more beneficial than longer sessions as the length of time can cause students to lose interest. It is important to plan this whole group instruction well in advance so educators are prepared and can think through the behavior's students might respond with. Practicing the activity ahead of time with all educators allows to work out any kinks in the system (DiCarlo et al., 2012, p. 157). This also helps prepare for the activity, so everyone is on the same page as to what needs to be done. When the class breaks into groups to complete the activity, each educator knows what they need to do rather than interrupting the previous activity to prepare for the current activity.

Play and group instruction. Activities might also incorporate play and small/whole group instruction. A lot of activities teachers utilize involve assessment or observation of students being told to do something and utilizing different materials such as blocks to do matching, numbering, or shape orientation (Ndoro, Hanley, Tiger, & Heal, 2006, p. 88). Teachers use materials which are interesting to young children as this helps foster attention. Another method of small/whole group instruction is circle time where students gather around the educator and focus in for a specific task. Circle time has been connected to achieving the highest percentage of student compliance (Ndoro et al., 2006, p. 88). Gaining students compliance is more likely to occur when delivered to a child is currently engaged in a task rather than a student

who was being disruptive or off task. The activity can also affect the amount of compliance

obtained by the educator. Teachers also use this time of instruction to educate students about

different behaviors such as waiting for your turn, listening to other, or guest speakers who might

provide information about a new and interesting topic. This research also showed little

difference between the amount of instructions given to students during teacher-based activities

versus child-initiated activities.

Play-based learning provides opportunities for young students to explore, experiment,

and express themselves (Edwards, 2017, p. 4). Whole group instruction has shown to increase

the sense of community in the classroom setting, prepare students for the expectations of

kindergarten, and increase preschooler's vocabulary (DiCarlo et al., 2012, p. 154). Each of these

methods of instruction have their advantages and disadvantages. It is unclear in the literature

which method of instruction is more effective with preschool students.

PRESCHOOL STUDENTS AND DIFFERENT LEARNING STYLES

Methods

Participants

Student participants in this study are preschool students who are between four and five years old. These students attend a half-day preschool program offered by the Iowa City Community School District as part of the state voluntary preschool program. The morning class consists of 16 students and the afternoon class has 17 students. The students completed the Get Set for School assessment at the beginning of the school year. The students come from a variety of household incomes ranges, ranging from poverty up to middle class. The following tables show a breakdown of student participants for the length of this study.

The gender differentiation is comparable to other classes and this division will not be a factor in the results of the study. The morning preschool program consists of 9 females which is 56% of the class and 7 males which is 43%. The afternoon program consists of 9 females which is 52% and 8 males which is 47%. It is very common to have more of one gender than another year to year. The student's gender is not an academic capability factor of the study and should not impact the study negatively. Both genders should be able to fully participate in this study as they already participate in lessons and classroom activities.

Table 1

Student Race

	Caucasian	Black or African American	Hispanic	Asian	More than one race
AM	12	2	0	1	1
PM	8	1	2	0	6

Notes: Based on parent's answers for school registration

The student's race is typical for the area surrounding the school and can vary from year to year. This year there are less Hispanics due to a recent re-districting trying to make each school

more diverse. The district is also no longer allowing transfers, if you don't like the home school

assigned to you based on where you are living you cannot transfer to a different school.

Caucasian students made up for 75% of the morning program and 47% of the afternoon program.

This percentage is slightly skewed as students identifying as multiple races were not specific. A

student's race is not a factor in this study as each student no matter their race is capable of

learning.

Table 2

Students Languages Spoken at Home

	English	Spanish	Hindi	Arabic
AM	13	0	1	2
PM	15	3	0	0

Notes: Based on parent's answers for school registration

Language is certainly a factor of the study as all lessons were taught and instructed in

English. Roughly 81-83% between the morning and afternoon programs are English speakers at

home. This leaves a small number of students who might have difficultly being receptive to the

lessons. These select few students could possibly not understand the lesson due to a language

barrier. English language services are not provided to preschool students at this school. These

results might be skewed if a student speaks more than one language and is not completely fluent

in English yet. Students were not tested on their knowledge of the English language before or

during this study, which could influence their understanding of the lessons resulting in impacts to

the entire study.

PRESCHOOL STUDENTS AND DIFFERENT LEARNING STYLES

Table 3

Services Provided to the Families

	Food Stamps	WIC	Title XIX	No services that the school is informed of
AM	2	2	2	14
PM	4	2	1	13

Notes: Based on parent's answers for school registration

A student's socio-economic status could influence the results of the study, but they were not specifically looked at. There is minimal difference between the morning and afternoon programs based on services claimed by the family of the student. These numbers are skewed as students claimed more than one service, so no one service can be pinpointed as a variable. Socio-economic status often plays a role in a student's academics; more in depth research here could be beneficial.

Procedures

During the first four weeks of school, the teacher assessed the students' current level of knowledge. This was done using the Get Set for School Assessment as required by the school's curriculum. This assessment tool is something that the Iowa City Community School District requires preschool teachers to use three times per year. Students worked one on one with the teacher to complete this assessment during class time. Upon completion of the assessment, the teacher used play-based learning with the morning preschool class and small group method of teaching with the afternoon preschool class for each lesson. These methods of instruction were utilized for four weeks before assessing the students again using the same Get Set for School Assessment to see how much they improved. At the completion of the four weeks, the teacher

was able to compare assessment scores from both the morning and afternoon preschool to see which method of instruction proved to be the most effective. The teacher and paraeducators observations will be used as qualitative data for the study.

Measures

The Get Set for School Assessment was utilized as it was already required by the school's curriculum and previously completed at the beginning of the school year. The Get Set for School Assessment tests a wide range of skills in each student. The math portion of the assessment assessed students' skills in the following areas: number identification, rote counting including counting sequentially, shape identification, positions, ordering, size comparison, patterns, and measuring (Appendix B). The literacy portion of the assessment assessed students' skills in the following areas: letter identification (capital letters, lowercase letters), describing and comparing, nursery rhymes/rhyming, identifying objects with prior knowledge, segmenting words, and blending words and sounds (Appendix A). Play-based instruction involved the use of hands on activities where students were able to work on different projects using objects in the classroom. The small-group instruction was more focused on different centers around the room and students spending a specific amount of time at each station. At the teachers table this is where the most small-group instruction occurred. The independent variables of the study are the two different methods of instruction, play-based learning, and small group instruction. The dependent variable would be the amount of growth between each of the two Get Set for School Assessments.

PRESCHOOL STUDENTS AND DIFFERENT LEARNING STYLES

Results

The Get Set for School Assessment was completed at the beginning of the school year. Students who attended the morning preschool session received their instruction via whole group instruction and play-based learning. The students who attended the afternoon preschool session received their instruction via small-group instruction. The Get Set for School Assessment was utilized again after 4 weeks to determine if one type of instruction was more beneficial than the other. The assessment was completed one on one with the teacher asking students different questions. The researcher hypothesized play-based learning would be more effective than small-group instruction, as play-based learning is a relatively newer and effective concept that keeps students engaged. The morning preschool session consisted of 16 students, minimal instruction was provided prior to the assessment.

Table 4

Morning Preschool Pretest Get Set for School Results

Measure	Math	Literacy
Mean	68	48
Standard Deviation	23	24
Range	91	73

Notes: These results were collected before the study began and at the beginning of the school year. Scores were rounded to the nearest whole point.

PRESCHOOL STUDENTS AND DIFFERENT LEARNING STYLES

Table 5

Afternoon Preschool Pretest Get Set for School Results

Measure	Math	Literacy
Mean	65	47
Standard Deviation	27	34
Range	93	97

Notes: These results were collected before the study began and at the beginning of the school

year. Scores were rounded to the nearest whole point.

Table 6

Pretest Get Set for School Results

	Literacy	Math
AM	48%	68%
PM	47%	65%

Notes: These results were collected before the study began and at the beginning of the school

year, very minimal instruction was provided prior to the collection of this data. Scores were

rounded to the nearest percent and presented as an average of total scores.

These test scores are typical for this type of classroom at this time of the year. The

morning and afternoon classes have the same instructors, utilize the same materials, and receive

similar instruction. Generally, at this time of the year there is not an individual class who scores

considerably better than the other. Literacy scores are within a single percentage of one another

while math scores are within 3% of each other.

PRESCHOOL STUDENTS AND DIFFERENT LEARNING STYLES

Table 7

Morning Preschool Post Get Set for School Results

Measure	Math	Literacy
Mean	71	53
Standard Deviation	24	25
Range	95	76

Notes: Results of this test were completed after 4 weeks of instruction. The morning preschool received their instruction via play-based learning. Scores were rounded to the nearest percent.

Table 8

Afternoon Preschool Post Get Set for School Results

Measure	Math	Literacy
Mean	67	51
Standard Deviation	26	33
Range	94	96

Notes: Results of this test were completed after 4 weeks of instruction. The afternoon preschool received their instruction via whole group instruction.   Scores were rounded to the nearest percent.

Table 9

Post Get Set for School Results

	Literacy	Math
AM	53%	71%
PM	51%	67%

Notes: Results of this test were completed after 4 weeks of instruction, the AM and PM classes were provided two completely different types of instruction. Scores were rounded to the nearest percent and averaged.

PRESCHOOL STUDENTS AND DIFFERENT LEARNING STYLES

After 4 weeks students made progress on their Get Set for School Assessment. The improvement observed between the morning and afternoon preschool classes was not substantial. The morning literacy assessment scores increased by 5% while the afternoon literacy increased by 4%. Meanwhile, the morning math assessment scores increased by 3% and the afternoon math increased by 2%. Across the board scores increased but only marginally.

Table 10

Pre and Post Get Set for School Results

	Literacy			Math	
	Pre	Post		Pre	Post
AM	48%	53%		68%	71%
PM	47%	51%		65%	67%

Notes: Results of this test were completed after 4 weeks of instruction. Scores were rounded to the nearest percent and then averaged.

Findings from this study indicate growth in both the morning and afternoon preschool sessions where two different types of instruction were utilized. There was a minimal amount of growth in all areas. The average amount of growth for the morning group between math and literacy assessment scores was 4%. While, the average amount of growth for the afternoon group between math and literacy assessment scores was 3%.

A dependent groups t test revealed there was a statistically significant difference in pre-test scores and its relationship with play-based learning practices (M=58.1, SD=25), as compared to post-test scores and its relationship with play-based learning practices (M=61.7, SD=25.7) following play-based learning practices with weak effect size, t=6.33, p=≤.00001.

PRESCHOOL STUDENTS AND DIFFERENT LEARNING STYLES

      A dependent groups t test revealed there was a statistically significant difference in pre-test scores and its relationship with small group instruction practices (M=56.1, SD=31.4) as compared to post-test scores and its relationship with small group instruction practices (M=59, SD=30.7) following a small group instruction intervention with weak effect size, t=9.67, p=$\leq$.00001.

PRESCHOOL STUDENTS AND DIFFERENT LEARNING STYLES

Discussion

The findings from this study indicate little difference between the two class times. It is difficult to determine if one method of instruction works better than the other based off of these results. Both small-group and play-based learning class sections saw an increase in test scores throughout the four weeks of this study. All students were provided with a literacy rich environment. Students worked on basic phonological awareness skills on a daily basis. Students also spend considerable amount of time working on various mathematics exercises either with blocks in the play-based learning or with pencil and paper in the small group instruction. Research shows students who are exposed to these phonological awareness and literacy skills at an early age are more likely to succeed in their future educational endeavors. Based off of these numbers it cannot be concluded that small-group nor play-based instruction is better than the other in this specific classroom setting.

Limitations of the study

Due to time constraints this study was only able to be conducted over a one-month period of time. Future research should be conducted that is allotted ample amount of time to gauge students' progress. The teacher's role in this study also changed from time to time as she was called away from the classroom for other various issues. When this occurred a para-educator became the lead instructor and while they had knowledge of the study they were not immediately involved. This led to issues with instruction as well as providing the Get Set for School assessment to students individually. There were approximately 3 days in which one of the para-educators was ill which caused the student-educator ratio to decline as a substitute was not obtained. This study was conducted in a blended preschool classroom. Approximately 6 students were a part of an English language learners' program as they spoke other languages

primarily, English was each of these students second language. This class also had a student

with behavioral issues who required the immediate attention of the teacher and para-educator

during lessons where explicit teaching and instruction was taking place. In the event of future

research, the teacher commented about switching the instruction groups around to see if the time

of day could also have an effect on students. The researcher must also consider the population of

the classroom setting and understand these are preschool students who are continuing to grow

and mature not only physically but educationally as well.

Conclusion

In this study the researcher examined the effectiveness of small group instruction versus play-based instruction taking place in a preschool setting. The researcher utilized two different preschool classes a morning session and an afternoon session. The morning preschool class consisted of 16 students and they received their lessons via play-based instruction/learning. The afternoon preschool class consisted of 17 students and they received their instruction via small group instruction. Data was examined after a 4-week period of time in which the students received their lessons from different types of instruction. The data gathered did not show a correlation to one type of instruction being more effective than the other. The results from this study showed a marginal increase in assessment scores across all areas however there was a statistical significance showing a weak correlation between the pre-test and post-test with its relation to the specific types of instruction. It is possible the outcomes of this study would be different if variables were measured over a longer period of time and limitations were kept to a minimum. If future research were to be conducted the researcher suggested a longer period of time for the implementation of the teaching practices between pre-test and post-test. If the study would allow, the researcher also commented about either switching up the different intervention teaching types or utilizing the same intervention with both morning and afternoon sessions for a period of time and comparing their results.

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PRESCHOOL STUDENTS AND DIFFERENT LEARNING STYLES

Appendix A

Get Set for School®　　　　**Language & Literacy: 1:1 Assessment Record**

Name _____ DOB _____ Date _____

1. Name Capitals
EA RI OT NS　　　LUC DMP HGK　　　YFW BQV XJZ

Notes _____
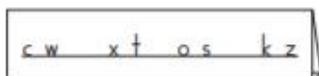
2. Name Lowercase Letters
cw xt os kz　　　uba yhg vjr　　　mde ipn fql
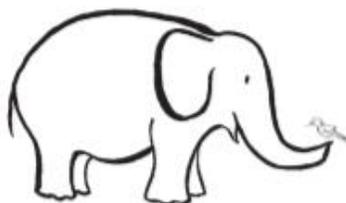
Notes _____

3. Describe and Compare
Elephant is big, bird _____　　uses trunk, bird _____
trunk is long, bird's beak _____　　has 4 legs, bird _____
is heavy, bird _____　　　can walk, bird _____
trumpet sound, bird _____

Notes _____

4. Nursery Rhymes & Rhyming
Repeat　❑ One, two, tie my shoe　❑ Jack and Jill　❑ Humpty Dumpty
Rhyme or not　❑ bear/ dog　❑ bear/chair　❑ chair/cat　❑ chair/bear
Rhyme find　❑ hat　　❑ frog　　❑ log　　❑ hair　　❑ mat

Notes _____

5. Words
What is this?　❑ car　　❑ banana　　❑ backpack　　❑ jacket

Which one do people drive?
Which one is used for carrying things? _____

Which one can people eat? _____
What foods do you eat? _____

Which one do people wear? _____
What clothes do you wear? _____

6. Word Parts
Compound words　❑ hot + dog　　❑ back + pack　　❑ cup + cake
Syllables　　　❑ ap + ple　　　❑ car + toon　　❑ jack + et
Onset – Rime　　❑ /s/ + it　　　❑ /r/ + un　　　❑ /k/ + ar

Notes _____

PRESCHOOL STUDENTS AND DIFFERENT LEARNING STYLES

Appendix B

Get Set for School® Numbers & Math: 1:1 Assessment Record

Name _____ DOB _____ Date _____

Adapt this for nonverbal, English language learners, or children who can't say names of shapes and numbers. Check their receptive understanding by letting them point to their answers. Say the names of the shapes or numbers in random order. Indicate all adaptations to the assessment.

Materials: For items 1-7: Make Student Assessment Display (fold and tape to make a triangular display); For items 8 and 9: Cut out 4 gray and 4 white squares.

1. Name Shapes What shape is this?
❏ circle ❏ heart ❏ square ❏ star ❏ triangle ❏ rectangle ❏ crescent (moon) ❏ diamond ❏ octagon (stop sign) ❏ oval

2. Rote Counting (no form) ❏ Count up to **5** ❏ Can you count to **10**? ❏ to **20**? _____

3. Name Numbers What number is this? 3 6 2 5 9 1 4 8 10 7

4. Object Counting
How many ladybugs _____
How many bees _____
How many bugs all together _____

Notes _____
_____

5. Positions
Point to the block ❏ in the middle.
                    ❏ on top.
                    ❏ on the bottom.

Which animal is **on top of** the blocks? ❏ ant
              in front of the blocks? ❏ bird
              behind the blocks? ❏ turtle
              beside the blocks? ❏ bear

6. Ordinal Numbers
Five animals are walking. Which animal is ❏ first ❏ second
                    And now, which is ❏ fourth ❏ third ❏ fifth

7. Size
Five animals are here. Which one is the biggest? _____ Which one is the smallest? _____
Which animal is bigger? ❏ elephant ❏ bear   Which animal is smaller? ❏ turtle ❏ cat

8. AB Pattern
Watch me start a pattern. Can you add to my pattern? ❏ Y ❏ N (If N, you may do together to teach.)

9. Measuring
Now use squares to measure. How long is this paper? This paper is _____ squares long.

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