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An Inclusive Playground for Infant and Toddler Development

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Abstract

The purpose of this project was to help children develop more proper developmental goals and make outdoor play at the Jean Tyson Child Development Study Center more inclusive for all children. Children gain many developmental goals from playing outside and being exposed to other environments as compared to just being inside the classroom. Outdoor play should be as inclusive as indoor play and offer many different activities and outlets, just as the indoor classroom does. The implementation of this service-learning creative project is to add more versatility to the outdoor area at the Jean Tyson Child Development Study Center and to provide young children with more experiences outside the classroom in an outdoor space. The two outdoor stations that were developed focused on art and a music area under the covering outside by the playground. These stations allow children other places to seek out when they do not want to or physically cannot run around on the other structures or are wanting a more one-on-one social connection during outdoor playtime with teachers or peers.

Introduction

Inclusion is becoming a more prominent topic in day-to-day conversations, especially in school and how children are able to be included and inclusive with others (Mulholland & O'Connor, 2016). Inclusion is important in school because it is the action of taking diversity and making it equitable to create a healthier learning environment for all (Mulholland & O'Connor, 2016). However, it is not just people who need to be inclusive; both access and availability of all accessories in and out of the classroom play a huge role in a student's success. There are many aspects of schools that could be analyzed for more ways to have equity and inclusion; however this creative project is focused on outdoor playground inclusivity for infant through preschool aged children. There are many studies that showcase the benefits of outdoor play for a child's development. Playground structures and outdoor environments have a pivotal role in contributing to those benefits whenever children have outside playtime at school. This service-learning project examines the different ways all children can enjoy outside playtime, and to ensure there is something for every child in the outdoor area of the Jean Tyson Child Development Study Center (JTCDS). The JTCDS is a learning center with infants ranging from 8 weeks old until 5 years old for the children of families in the northwest Arkansas region, with students from the University of Arkansas attending as part of their coursework. This center was chosen because of its direct impact and influence on the UA campus and that it strives to utilize child-first protocols for the best learning experiences.

Typically, recess is viewed as a physical moment, with running around on a big structure, but for children who are introverted, physically disabled, or wanting to use outside time for a more creative outlet, this inclusion project is centered for them. The outdoor area focused on

adding elements of art, music and more social interactions for any child who desires to use those spaces. The purpose for the project was not only to add structures to create more inclusion, but also to allow for children to potentially meet more developmental standards. There are many ways that young children can meet early learning standards inside the classroom. The additional areas outside will potentially give more experiences for those children to have an equal opportunity of achieving some of those standards during outdoor play as well.

Literature Review

When implementing a new playground structure to help prosper a child's development, there are many things to consider and perspectives to analyze to develop the exact purpose and goal of the structure. Reviewing past literature in order to develop supporting ideas on which direction to take the new playground structure was crucial in order to fully know what would fit best at the Jean Tyson Child Development Study Center. The four areas that needed to be researched were inclusion and how that plays a role on the playground, a child development theory to support the need for the playground, the benefits of outdoor play for children and lastly how the Arkansas Child Development and Early Learning Standards would be used to provide evidence of the children's prospering development.

Inclusion. For the initial development of this new playground structure that was going to be added, it was the priority for it to have a level of inclusion for every student and child at the center. Inclusivity can have a lot of meanings, but in the context of this creative project was focusing on all types of personalities and abilities of children (Moore & Lynch, 2015). When defining outdoor play, there is a lot of physical movement and play that is thought of but not all children want to run around outside and be super physically active. Some, more introverted children, do not have as many outlets to use or play with outdoors. If a child is wanting to be

more creative and imaginative with their outside playtime, they are not always given all the materials and resources to be able to do that. Similarly, if a child has a physical disability, either temporarily due to a broken bone or permanently, the playground and outside time might seem more useless to them if they are not given activities to engage in (Moore & Lynch, 2015). For a playground to be inclusive to all children, it must appeal to all different personalities, abilities and it must engage children in ways that they may never even knew they wanted to be engaged by before.

Child Developmental Theory. To better understand the need for children's development to be specifically stimulated by caregivers, it is important to look at Jean Piaget's theory of cognitive development. The theory discusses four stages that children enter which can help explain brain and cognitive development that a child understands and sees (Babakr, Mohamedamin, & Kakamad, 2019). The first two stages focus on infant and toddler ages as sensorimotor (from birth to two years old) and preoperational (two years to seven years old). As an infant grows, they go through the sensorimotor stage exploring their senses and moving around their environment (Mcleod, 2020). Infants also begin to understand that they have self-regulation, other people are separated from them, and object permanence, i.e., objects exist even if they can no longer see them (Babakr, Mohamedamin, & Kakamad, 2019). The following stage, preoperational, is all about starting to classify things as they appear through mental imagery and language as well as symbolically thinking about words or objects (Mcleod, 2020). These stages and knowing how a child views the world, classrooms, and objects around them can give insight to how an educator can create an environment that promotes their cognitive learning.

Outdoor Play. There are many testaments that show the number of children who play outside nowadays is much fewer than those who would play outside a few decades ago

(Clements, 2004). This decline is due to many factors, however the children who do not continue to engage in outdoor play are the ones who are missing out on the multitude of benefits they could be getting. Playing outside has shown to have many physical health benefits for children such as low blood pressure and cholesterol levels (Mahyok, 2015). There are also many mental health benefits to outdoor play allowing children to have better emotional stability because of their ability to run free, shout and blow off steam while being outside on the playground (Mahyok, 2015). Given the many benefits outdoor play brings to children, it is important to continue to challenge their development outdoors just as much as inside the classroom. While bringing components, usually used inside, outdoors can add a level of diversity for children as well as create more improvements and achievements in their physical, mental, and overall health.

Arkansas Child Development and Early Learning Standard. Early learning standards have been adopted by most states serving as guidelines for expectations and desires for children under the kindergarten level (National Association for the Education of Young Children, 2002). The purpose of having the standards is to allow for children attending preschool and before entering elementary school to have an idea of where they should be cognitively, socially, physically, and developmentally in order to be successful in further education. The Arkansas Child Development and Early Learning Standards, also known as CDELS, provides this same threshold for all pre-elementary school children. Learning standards provide a threshold of support that all educators and caregivers should be giving these young children in order for them to be meeting the standards. If a child is falling short, the standards aide in highlighting where the child may have additional needs, a disability or space for the caregiver to improve (National Association for the Education of Young Children, 2002). The CDELS is used many times when observing in labs or classrooms at the Jean Tyson Child Development Center and is a good

model to help guide what types of play structures children could benefit from in the outdoor area. There is a timeline of expectation that a child would engage in a certain standard and what that action should look like (Arkansas Head Start, 2016). There are many different social and physical standards that can be met through this creative project and the CDELS will help identify those benefits the children are receiving through this developmental implementation.

Development Plan

In order to create stations that were unique but beneficial and developmentally appropriate, the basic school subjects were analyzed to see where the outdoor area was lacking and what could be brought outside that was practical. Art and music were the chosen subjects that were very much core to most curriculum that also were in reality, probable to bring outside and would be durable through all forms of weather. Art and music also brought more creativity and imagination for outdoor use because they are very abstract and limitless outlets for children. There is research about the benefits children receive when connecting nature and art together in outdoor spaces. Specifically, outdoor art spaces seem to create more developmental opportunities as well as impacting the wellbeing and health of children exposed to those environments (Moula, Palmer & Walshe, 2022). Music and music therapy have been used for years to showcase the aide it has in children with behavioral, emotional, or other disorders and disabilities (Sze & Yu, 2004). Bringing music into daily educational settings has proven to help develop problem solving skills, analyzing situations and enhance children's creativity (Sze & Yu, 2004). After looking into all the research and developments that have been made on the benefits of art and music, it was clear that combining outdoor nature, art and music, the children would be experiencing the most inclusive, beneficial addition to the outdoor area at the Jean Tyson Child Development Center.

Research on different music and art stations were conducted to look into the different structures and areas that could be created in the empty space given for this project. There were different variations of what would be used in the space. For the art station, an art easel with some shelves attached or a place to hold paint was ideal. There was also a desire for the easel to have a clear screen so that paper could be attached, or children could paint directly onto a plexiglass material for easy wipe-off and restart. There was an art easel found from a company called Community Playthings that had adjustable easel boards so they could be tall and vertical or horizontal, depending on the height of the child using it. The easel also had shelves for materials, a magnetic white board backing for easy attachment of paper or utilizing the plain board for art. In the music station, there was not many options for one structure that had all the components of instruments attached. The idea of putting in a bench or a table with multiple chairs around for a music table station was the more practical idea unless a music structure, already built, was found at an affordable price. There were multiple music pieces that were found that had many different instruments attached. Three different music sets seemed to cover all bases to ensure there were a variety of components and also allowing multiple children to access the music station at one time.

Both stations and areas needed to have a solidified structure to them so that they would not be easily moved, would be able to withstand any weather conditions and to be durable for many years. It was also important that the director and educators at the Jean Tyson Child Development Study Center agreed and saw the need and benefit from both stations being implemented. Both stations will require some sort of adult supervision while being used so the educators support in this project was necessary. Educators' ideas and contributions helped make

the final decision that both areas would be sought after and that the children would use and appreciate those outlets for more activity.

Design Process and Creative Works

Outside Area. At the Jean Tyson Child Development Study Center, there is an outdoor play area in the back of the building for children to use during recess. A portion of that area is



Figure 1 - Outdoor Porch

covered by the roof extending over it. There is a porch with a ramp on one side and stairs on the other, all enclosed with a metal gate. The gate has openings to get from one side to the other and also to get down to the play areas. The covered porch is where both the art and music stations were going to be placed so that they

would have some protection from severe weather. The center was wanting to use more natural looking, wooden pieces because they are hoping to renovate the entire outdoor area at some point. The wooden art and music pieces will complement this vision; and to ensure that they are still durable, the pieces needed to be kept in the safest place outside for precautions. Before bringing in the art and music stations, the current playground was photographed to have an idea of placement for the additions as well as seeing what would fit and blend in the best with what the center has.



Figure 2 - Empty Wooden Table

Art. The art station is the first station that was going to be introduced to the children during outside playtime. The reason behind this is because the art easel, paint and paper will be easier for the children to be acclimated to as there are not as many moving parts and is more self-explanatory and self-sufficient. The art station will also give teachers and caregivers time to get



Figure 3 - Before Art Station



Figure 4 - Completed Art Station

adjusted to the fact that there will need to be at least one adult supervising the station at all times while children are using different paints to ensure it does not get out of hand or become too

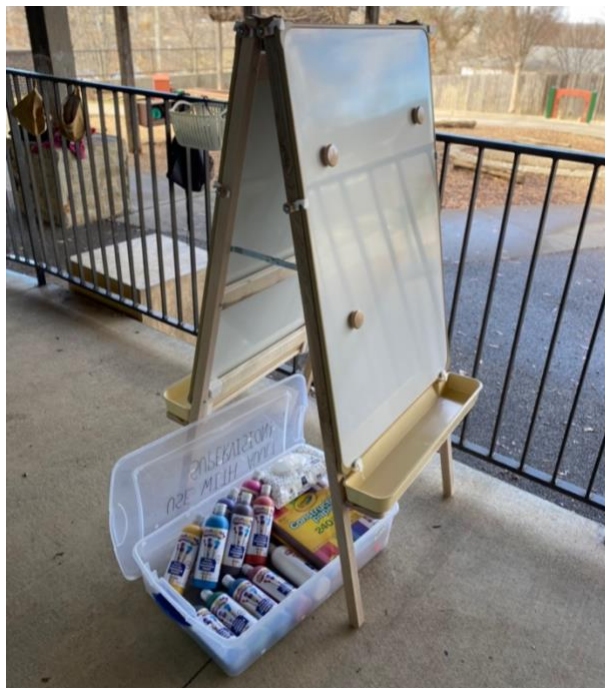


Figure 5 - Art Easel

messy. The art easel was placed at the top of the porch, overlooking the playground. This placement was ideal because it was still guarded by the gate to give the art station its own space but also so children can overlook the playground for potential inspiration for what they want to paint or draw. There are 11 different paint colors to choose from as well as colored construction paper to use as a canvas for the art. The paper can be easily attached to

the easel with the magnets provided and there is a shelf at the bottom of the easel to rest paint,

brushes, or sponges. There was also a bin added to sit underneath the easel to hold all the materials needed to be used for the art station. The bin allowed for everything to be kept in one area and easy access so that no educator



Figure 6 - Art Station Materials

has to be responsible for carrying materials in and outside for playtime.

Music. For the music area, there were multiple pieces that were gathered to assemble a space with enough room for multiple children to utilize the musical instruments at the same time. There were three different pieces, all composed of different instruments such as drums, xylophones, wooden noise makers, tambourines, a wind chime, and bells. Each piece came with all the musical instruments detached and needed assembly. The instruments in the colorful and



Figure 7 - Before Music Station



Figure 8 - Completed Music Area

nature music set are all screwed in, so they are more solidified as one piece. Whereas the percussion set is composed of all instruments being able to be removed and accessed individually. Having both options of one set being permanently together and one have removeable pieces was ideal



Figure 9 - Colorful Music Set



Figure 10 - Percussion Set

so that the children could either play by themselves or invite friends over to engage in the music together. All of the music pieces have legs that they stand on to a sort, however in order for easier access, a table was needed to place the instruments on for better use. The area of the playground that the music station was set up in was at the bottom of the porch. The location of the music station complemented well with the rest of the playground because it was enclosed on both sides with gates as well as was in the area that previous sensory tables were so that the children

so that the children could either play by themselves or invite friends over to engage in the music together. All of the music pieces have legs that they stand on to a sort, however in order for easier access, a table was needed to place the instruments on for better use. The area of the playground



Figure 11 - Nature Music Set

were familiar with it. Most of the musical instruments are detachable so it will be important for educators to continue to provide instructions and structure the children on how to properly take care of this area of the playground so that the instruments do not wonder outside of the designated area or get lost.

Discussion

The additions to the playground at the Jean Tyson Child Development Study Center were a huge success and fit well with the research conducted in order to provide more inclusivity for outdoor playtime for the children at the center. The purpose of this service-learning creative project was to develop spaces that brought about more options for children whenever they are outside for recess. This project brought about more inclusion for all different types and personalities of students at JTCDS and allowed each and every child to enjoy and have multiple options of activities they can engage in while outdoors on the playground. As seen in the research, bringing art and music activities to the playground, allowed children to have more experiences and opportunities to achieve the early learning standards (Moula, Palmer & Walshe, 2022). Outdoor play is pivotal for children's developmental growth; the art and music stations will assist with increasing developmental goals being met by the children at JTCDS. This study will help with the learning standards in the areas of language, social, cognitive, and physical play (Arkansas Head Start, 2016). Students will be able to use gross and fine motor skills, interact with peers and educators, as well as learn the responsibilities to take care of these stations and the objects that belong in them which will fit into many components of the learning standards. More inclusion on playgrounds is important because schools are supposed to be a safe space for children to learn and grow in new environments. Whenever the playground is tailored to all types

of children in personality and accessibility, it allows the children to feel seen and comfortable that there are activities and exercises that appeal to them.

Conclusion

This creative project was only a small step in the right direction for the outdoor space at the center. Although there are two new spaces to provide more inclusion, in the future, the center should focus on remodeling the entire outdoor play structures to allow for more inclusion in the whole space. There are still many components of the current outdoor area that could be changed and improved to make every child able to access, when developmentally appropriate. In the future, the center could also look into adding more music or art components to the areas that were created in this project to allow more children to be able to use those spaces at the same time. The limitations in this study were the need to use already made products to add to the music station. The music station could have been improved if a structure could have been developed, made, and created solely from scratch to be able to fit every need, be durable, age appropriate, and realistic with the children's use of it. The way the music station is now, the educators will have to be more attentive to ensure that the space is taken care of because of the many removable music pieces and making sure that they stay in the area and not get lost or wonder elsewhere.

Overall, finding how to create more advantages and benefits for children through scientific research through outdoor play and inclusion was the overall goal of this service-learning creative project. The Jean Tyson Child Development Study Center focuses on how to meet every child's needs exactly where they are at, and these additions to the outdoor playground helped continue to make that mission a reality. The children now have more access to activities that were once limited to just inside the classroom. Inclusive environments can encourage

children to explore the world around them and ultimately to allow them to prosper in their development.

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