

Discovery, The Student Journal of Dale Bumpers College of Agricultural, Food and Life Sciences

Volume 24

Article 12

Fall 2023

An Inclusive Playground for Infant and Toddler Development

Amanda M. Swartz

University of Arkansas, Fayetteville

Jacquelyn D. Wiersma-Mosley

University of Arkansas, Fayetteville

Donia Timby

University of Arkansas, Fayetteville

Shelley McNally

University of Arkansas, Fayetteville

Caitlyn Daniel

University of Arkansas, Fayetteville

Follow this and additional works at: <https://scholarworks.uark.edu/discoverymag>



Part of the [Agribusiness Commons](#), [Agricultural Economics Commons](#), [Agricultural Education Commons](#), [Agronomy and Crop Sciences Commons](#), [Animal Sciences Commons](#), [Botany Commons](#), [Communication Commons](#), [Entomology Commons](#), [Environmental Studies Commons](#), [Family and Consumer Sciences Commons](#), [Food Science Commons](#), [Horticulture Commons](#), and the [Nutrition Commons](#)

Recommended Citation

Swartz, A. M., Wiersma-Mosley, J. D., Timby, D., McNally, S., & Daniel, C. (2023). An Inclusive Playground for Infant and Toddler Development. *Discovery, The Student Journal of Dale Bumpers College of Agricultural, Food and Life Sciences*, 24(1). Retrieved from <https://scholarworks.uark.edu/discoverymag/vol24/iss1/12>

This Article is brought to you for free and open access by ScholarWorks@UARK. It has been accepted for inclusion in Discovery, The Student Journal of Dale Bumpers College of Agricultural, Food and Life Sciences by an authorized editor of ScholarWorks@UARK. For more information, please contact scholar@uark.edu, uarepos@uark.edu.

An Inclusive Playground for Infant and Toddler Development

Meet the Student-Author



Amanda Swartz

I moved from The Woodlands, Texas, to attend the University of Arkansas in August 2019. I graduated high school from The Woodlands High. During high school, I worked at a pre-school daycare center which is where my initial passion for helping children started. I did not know exactly what career I wanted to embark on but I knew I wanted it to be centered around children and helping others, which ultimately led me to pursue my undergraduate degree in Human Development and Family Sciences. I joined a Greek life organization on campus, which later led me to attain 3 different officer positions. These positions were held from November 2020 to September 2022, during which time I got to lead over 200 women in various events and activities. I also completed over 250 service hours throughout my 4 years at the university, which included volunteer work with more than 5 different philanthropies in the Northwest Arkansas region. I received the Honors Research Grant when I began my service-learning creative honors project in August of 2022. I was awarded the Human Environmental Sciences Outstanding Student Award as well as named a Senior Scholar by Dale Bumpers College of Agriculture, Food and Life Sciences. This creative project could not have been done without the guidance of Dr. Jacquelyn Mosley and knowledge from Ms. Donia Timby. I thank both of them as well as Ms. Caitlyn Daniel and Dr. McNally from the Jean Tyson Child Development Study Center, for their assistance in the project.



Amanda setting up the music station at the Jean Tyson Child Development Study Center.

Research at a Glance

- This project created more inclusive activities for children during outside playtime.
- The children received multiple benefits from music and art being added to their outdoor play experience.
- The stations stimulated growth in children's cognitive development as well as other areas of growth.

An Inclusive Playground for Infant and Toddler Development

Amanda M. Swartz, Jacquelyn D. Wiersma-Mosley,† Donia Timby,§
Shelley McNally,‡ and Caitlyn Daniel¶*

Abstract

The purpose of this project was to help children reach more developmental goals and to 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 was to add more versatility to the outdoor area at the University of Arkansas 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 music and were under a roof beside 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 want a more one-on-one social connection during outdoor playtime with teachers or peers.

* Amanda M. Swartz is a May 2023 honors program graduate with a major in Human Development and Family Sciences, School of Human Environmental Sciences.

† Jacquelyn D. Wiersma-Mosley, the faculty mentor, is a Professor of Human Development and Family Sciences in the School of Human Environmental Sciences and Assistant Dean for Diversity, Equity, and Inclusion, Bumpers College.

§ Donia Timby is a Senior Instructor of Human Development and Family Sciences in the School of Human Environmental Sciences.

‡ Shelley McNally is an Associate Professor of Practice at the Jean Tyson Child Development Study Center, School of Human Environmental Sciences.

¶ Caitlyn N. Daniel is a Teaching Associate with the Jean Tyson Child Development Study Center, School of Human Environmental Sciences.

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 and O'Connor, 2016). Inclusivity can have a lot of meanings, but in the context of this creative project, it focuses on all types of personalities and abilities of children in outdoor play (Moore and Lynch, 2015). Mental health benefits in outdoor play allow 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). To better understand the need for children's development to be specifically stimulated in outdoor play, 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 how a child sees and understands the world around them through their cognitive development (Babakr et al., 2019). The preoperational stage 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 can give insight into how an educator can create an environment that promotes their students' cognitive learning.

The University of Arkansas Jean Tyson Child Development Study Center (JTCDS) is a learning center with infants ranging from 8 weeks old to 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 University of Arkansas campus and because it strives to utilize child-first protocols for the best learning experiences.

The purpose of the project was not only to create more inclusion but also to allow children to potentially meet more developmental standards. 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 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.

Materials and Methods

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. Art and music were the chosen subjects that were core to most curricula and also were, in reality, possible to bring outside, being durable through all forms of weather. Art and music also brought more creativity and imagi-

nation for outdoor use because they are abstract and offer limitless outlets for children.

Research on different music and art stations was conducted to investigate different structures and areas that could be created in the empty space given for this project. For the art station, an art easel with some shelves attached or a place to hold paint was ideal. An art easel was found (Community Playthings, Kansas City, Missouri) that had adjustable easel boards for accessibility for any child using it. The easel also had shelves for materials and a magnetic whiteboard backing for easy attachment of paper or utilizing the plain board for art. In the music station, there were not many options for a single structure that had all the components of instruments attached. The idea of putting a table with multiple music sets on top was a 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 while also allowing multiple children to access the music station at one time.

An outdoor play area at the back of the Jean Tyson Child Development Study Center was identified. A portion of that area is covered by a 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 will protect both the art and music stations from severe weather. The center desired more natural-looking wooden pieces because they hope to renovate the entire outdoor area in the future. It was also important that the director and educators at the Jean Tyson Child Development Study Center agreed and saw the need and benefit of implementing both stations. Both stations will require some adult supervision while being used, so the educators' support in this project was necessary. 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 to see what would fit and blend in the best with what the center has.

The art station was the first station introduced to the children during outside playtime. The reason behind this was the art easel, paint, and paper were expected to be easier for the children to be acclimated to, as there are not as many moving parts, and it is more self-explanatory and self-sufficient. The art station also gave teachers and caregivers time to adjust to the need for at least one adult to be supervising the station at all times while children were using different paints to ensure their appropriate use. 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 giving the art station its own space but also allowing children to overlook the playground for



Fig. 1. View of the area of the University of Arkansas Jean Tyson Child Development Study Center before the installation of the art station.



Fig. 2. View of the area of the University of Arkansas Jean Tyson Child Development Study Center after the installation of the art station.

potential inspiration for what they want to paint or draw. There were 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 was 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 keep all the materials in one area so that no educator had to be responsible for carrying materials in and outside for playtime. (Figs. 1 and 2).

For the music area, there were three different sets, all composed of different instruments such as drums, xylophones, wooden noisemakers, tambourines, a wind chime, and bells. Each piece came with all the musical instruments detached and needed assembly. The instruments in the colorful and nature music set were all screwed in, so they were one piece. In contrast, the percussion set was composed in a way that all instruments are able to be removed and accessed individually. Having both options, with one set being permanently together and one having removable pieces, was ideal 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; however, in order for easier access, a table was needed to place the instruments on for better use. The area of the playground where the music station was set up was at the bottom of the porch. The location of the music station complemented the rest of the playground well because it was enclosed on both sides with gates as well as in the area that previously had sensory tables, so the children were familiar with it. Most of the musical instruments were detachable, so it was important for educators to continue to provide instructions and structure to the children on how to properly take care of this area of the playground so that the instruments do not wander outside of the designated area or get lost. (Figs. 3 and 4).

Results and Discussion

The purpose of this service-learning creative project was to develop spaces that bring about more options for children when they are outside for recess. There is research on 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 impact the health and well-being of children exposed to those environments (Moula et al., 2022). Art and music therapy have been used for years to aid children with behavioral, emotional, or other disorders and disabilities (Sze et al., 2004). Bringing music into daily educational settings has proven to help children in developing problem-solving skills, analyzing situations, and enhanc-

ing their creativity (Sze et al., 2004). As seen in the research, bringing art and music activities to the playground allows children to have more experiences and opportunities to achieve early learning standards (Moula et al., 2022). Outdoor play is pivotal for children's developmental growth; the art and music stations will prove to assist with increasing developmental goals through the early learning standards. This project will help 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 responsibility through taking care of these stations and the objects that belong in them, which will fit into many components of the learning standards.

This creative project is 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. The limitations of 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. With the current set-up, 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 the need to make sure that instruments stay in the area.

Conclusions

Finding how to create more advantages and benefits for children through scientific research regarding 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, 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 allow them to prosper in their development.

Acknowledgments

This creative project was financially supported by an undergraduate honors research grant as well as physically supported by educators from the Jean Tyson Child Development Study Center.

Literature Cited

- Arkansas Head Start. 2016. Arkansas Child Development and Early Learning Standards. Birth through 60 Months.
- Babakr, Z., P. Mohamedamin, and K. Kakamad. 2019. Piaget's Cognitive Developmental Theory. *Critical Review Education Quarterly Reviews*; 2:(3), Available at SSRN: <https://ssrn.com/abstract=3437574>
- Mahyok, H. 2015. Safety and Risk: Benefits of Outdoor Play for Child Education. *Int. J. Educat. Res.* 6(3):50–62. Available at: <http://ijer.inased.org/makale/92>
- McLeod, S. 2020. Jean Piaget's theory and stages of cognitive development. *Piaget's Theory and Stages of Cognitive Development*. Accessed 29 November 2022. Available at: <https://www.simplypsychology.org/piaget.html>
- Moore, A. and H. Lynch. 2015. Accessibility and usability of playground environments for children under 12. A scoping review, *Scandinavian J. Occupational Therapy*. 22(5):331-344. Available at: <https://dx.doi.org/10.3109/11038128.2015.1049549>
- Moula, Z., K. Palmer, N. Walshe. 2022. A systematic review of arts-based interventions delivered to children and young people in nature or outdoor spaces: Impact on nature connectedness, health and wellbeing. *Frontiers*. Accessed 6 February 2023. Available at: <https://www.frontiersin.org/articles/10.3389/fpsyg.2022.858781/full>
- Mulholland, M., U. O'Connor. 2016. Collaborative classroom practice for inclusion. *Perspectives of classroom teachers and learning support/resource teachers*. Accessed on 6 February 2023. Available at: <https://www.tandfonline.com/doi/full/10.1080/13603116.2016.1145266>
- National Association for the Education of Young Children. 2002. Early Learning Standards. Creating the Conditions for Success. Available at: https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/position-statements/position_statement.pdf
- Sze, S., S. Yu. 2004. Educational benefits of music in an inclusive classroom. Online Submission. Accessed 6 February 2023. Available at: <https://eric.ed.gov/?id=ED490348>
-