

Learning at Dimensions Education Programs



Dimensions[™]
Education Programs

Nature's Lessons: A Way of Teaching at Dimensions Education Programs

Our hurried lifestyles can all too often cause us to miss much more than just the natural wonders of our world. How often are we grownups in such a hurry for children to master the alphabet, pass the next test or prepare for the next grade that we miss the treasure of who each child is as a unique individual? Are we giving ourselves, and our children, a chance to take a deep breath and enjoy our natural world, enjoy childhood, and enjoy each other? We believe that teaching with nature can be an antidote to our sometimes frantic approach to life in general and so it is an integral part of all that we do.

It's no doubt that our children are growing up in a fast-paced world. Technology is a great connector, but it can also demand that we be instantly available to each other, no matter what. One antidote is a nature-filled learning environment that provides that safe haven. There, away from televisions, video games, smart phones and computers for a brief time each day, the world can slow down and everyone can breathe easier. Children can be children, adults can smile more, and discoveries can unfold slowly, with no expectation of "finding the one right answer."

What doesn't have to slow down, however, is learning.



A Whole-Child Approach to Learning

Educators love to divide children's learning into "subject areas" or "domains." Doing so is helpful in many ways. By focusing on discrete topics – like language and literacy or science or math – we can assess whether children are developing the many skills and understandings they will need in order to become adults fully equipped to participate in life. But if we're not careful, we can fool ourselves into thinking that learning takes place in segments. In reality, it is crucial for educators and parents to recognize that children learn and develop best when they gain skills holistically. Children develop skills and understandings in many areas at the same time while also engaging in personally meaningful explorations of the world around them. This is why learning with nature is such a powerful motivator for holistic development. Parents often want and need to know more about how and what benefits occur for their children while at Dimensions.

Here are some descriptions of the ways in which teachers support learning:

Language/Literacy

It has long been recognized that early language development provides the foundation for later learning in all curriculum areas. It is equally important to recognize that literacy development is about much more than learning a set of symbols (alphabet); it is a system for communicating and making meaning.

Young children's rich vocabulary development is readily supported in nature because experiences are first hand and real. Children's inquisitive dispositions lead them to constantly seek new information, and interactions in nature-filled settings allow adults to easily extend children's experiences and thought processes. As infants and toddlers use all of their senses to interact with interesting, and ever changing materials, children want to ask questions and practice new words they are learning. When caring adults support this natural curiosity and sense of wonder, relationships blossom alongside blooming communication. As preschool children grow, their explorations become more sophisticated beginning to encompass early reading and writing forms of expression. Older children might use books as references to help identify insects, write signs for the garden, or create poetry inspired by nature's beauty. Making maps of their outdoor space, drawing shapes found in nature, or sketching flowers can all be pre-cursors to learning to write letters and words. Interactions with nature often motivate children to want to share what they know with others or record personal discoveries. Wise teachers and parents can use this motivation as a way to encourage writing.

Science

By their very nature, all young children are scientists. They are naturally curious and the world is their laboratory. From birth, babies use their senses to gather information and make meaning from the chaos that surrounds them. They sort through all of the sensory input they receive, search for patterns and begin to classify what they are observing into various categories. In this way, the world begins to make more sense. As children grow and develop, they ask questions and actively explore. All the while, they are comparing what they think they know with what they are actually observing. They then can reflect on this new information and become active participants in the process of developing ever-more complex science understandings. This way of learning strengthens critical thinking skills, which is helpful in all areas of learning, not just science. In our Nature Explore Classrooms, children are observing, investigating, devising experiments and problem-solving. Through that process they are learning scientific concepts that they will later be able to attach vocabulary to because they understand it intuitively.

This kind of developmentally appropriate earth science learning can and should also lead to environmental awareness. Authentic science learning helps children become more knowledgeable about the Earth's systems and the interconnectedness of humans and the natural world. Helping children develop emotional connections to the natural world is the most appropriate place to begin.



Social/Emotional

Positive sense of self, feelings of cooperation and community

Infants come into this world hard-wired for interactions, seeking connections with those around them. Experiencing trusting relationships with primary caregivers is a crucial component of children's healthy emotional growth. Without this attachment, it is hard for children to develop a positive sense of themselves as individuals. Unfortunately, many parents and caregivers today report feeling high levels of stress, distraction, and isolation, which can all create barriers to healthy adult-child attachments. One way to overcome these challenges is by providing easily accessible and nurturing natural environments that reduce stress levels in both children and adults. Interactions with nature support feelings of calmness and tranquility, allowing people to truly be 'in the moment'. When teachers and parents discuss the value of adding more nature connections to children's lives, both in and out of school time, families often begin to make nature outings a regular part of their weekly routines. In calm settings, adults are able to observe and celebrate their children's unique qualities, which, of course, helps children learn to celebrate and value themselves more fully.

As children share ideas, negotiate, make decisions, decide on tasks and roles, and problem-solve together, they develop a wide range of social and emotional skills. Some conflict between children is inevitable, and can even be beneficial in small amounts so children have opportunities to develop coping skills and learn their own capabilities. Much like a muscle needs exertion to grow, children need doses of manageable stress and challenge to develop to their full potential. Nature-filled outdoor classrooms provide the time, space and calm setting that can support children in responding to experiences with an appropriate range of emotions. Teachers who encourage children to identify and label their feelings help lay the foundation for both a strong sense of self and the growth of empathy. As children grow in their independence, sense of self, and ability to communicate, they begin to become aware of others as separate beings with their own thoughts and emotions. This leads to greater forethought and less impulsivity. They become aware of the need for cooperation, and they start defining themselves as members of a wider community.



Mathematics

As young children engage in play and experiences they create themselves, they use math concepts in multiple ways; to explain themselves to others, to recount recent events and to help solve their problems. They often physically experience many mathematical concepts in our outdoor classrooms because of the size of the space and materials such as sand, dirt, sticks and leaves available. Those concepts include volume, area, perimeter, diameter, circumference, length, height, width, size, and geometric shapes.

Children get to observe whole-part relationships first-hand and experience time concepts such as seasons and life-cycles. As they use math concepts naturally, in the context of their play, it allows them to begin to understand the function of mathematical concepts in ways that are meaningful to them, building on what they already know and exploring new ideas. Children explore patterns, the attributes of objects, and shapes. They encounter opportunities to estimate, measure and count. Children also observe and use different sizes and lengths of materials, which helps them develop estimation and comparison skills. All of these experiences during early childhood both outdoors and indoors, especially in the Block Area, help children develop concrete mathematical thinking that prepares them later understand abstract math concepts.



Body Competence

Appropriate Risk-Taking Through Active Play

Just as an active lifestyle is beneficial for adults, children need active play to support healthy bodies. When children are able to have that brain- body connection, cognitive and physical development can happen at the same time. As children are experimenting with balance, learning about their own centers of gravity, and figuring out how much muscle power is needed to accomplish tasks, a great deal of problem-solving and creative thinking is taking place. In these situations, it is necessary for adults to understand the learning possibilities. Consistently calling children's attention to the risks undermines their confidence and ability to determine for themselves what is safe and what is not. Adults should stay nearby and give children information if a proposed activity really is too dangerous. Whenever possible, though, it's important to allow children to assess risks for themselves so they gain the skills to keep themselves safe.

These experiences are important to physical health, but are only a part of overall physical development. At Dimensions, we incorporate a complete mix of activities, to ensure that children have opportunities for comprehensive physical development. Music and Movement time often involves opportunities for children to explore purposeful movement and practice self-calming techniques. For overall wellbeing, children also need changes of pace in physical activity throughout their day. Chances to quietly reflect and be calm are just as important as opportunities to be boisterous and active.

"All children, whatever their physical abilities and limitations, need the opportunity to literally reach new heights and run wild. They need the stimulus of risk; they need choices in climbing, sliding, swinging, and so on so that they can determine the excitement and challenge they are ready for." – Jim Greenman, Caring Spaces

Multi-Sensory Learning

Outdoor sensory experiences are extremely beneficial for young children because it is mainly through their senses that they are collecting information and learning to understand the world around them. Despite children's physical capacity to perceive sensory stimulation well during the early years, practice processing that sensory information is vital for healthy brain and central nervous system development.

Healthy Eating

Healthy eating habits are encouraged when children are involved in the growing process and understand where the food they eat comes from. Simple gardening activities engage children from planting to weeding to harvesting and cooking. We strive to provide year-round opportunities for children to experience planting, growing, harvesting and helping prepare food from our outdoor classrooms and greenhouse. This emphasis is also why we encourage families to bring fresh fruits and vegetables for snack and in packed lunches.

Creative Arts

Learning to interpret the world around us so that we can find our place in it, and are able to contribute to it, is what education is all about. Creativity is the way children express their uniqueness. When they act out stories, make music, paint or draw, they make visible what they know, what they feel, and who they are. Children's creative expression can be divided them into three categories: Creative Dramatics, Music and Movement, and Visual Art. The process of creating art is one way that children can synthesize all that they are learning about the world, especially the natural world. Creative Dramatics learning can be understood through the ways children engage in elaborate, imaginative play showing what they were thinking about and how they were making sense of their surroundings. Many adults today are concerned that children's play is becoming dominated by commercial media, wherein they mostly act out stories they have seen on television or in movies. When children have access to open-ended and natural materials with which to create their own props, it seems to fuel their innate creativity. Extended unstructured times require children to think of their own ideas rather than waiting to be entertained or directed by adults. Children have opportunities for self-initiated activities during indoor and outdoor Work time. You will notice that many of the materials teachers provide for children can be used in a variety of ways and in many different combinations. As Daniel Pink says in his book, *A Whole New Mind*, adults today are preparing children for future jobs we can't even imagine. The skills our children will most likely need include the ability to know what questions to ask, and to see the possibilities in new situations. Play with open-ended materials fully supports this type of learning and thinking.

Music and Movement learning reflects the way children are inspired to create music and then respond to that music through movement. We believe in exposing children to a "sumptuous buffet" of musical styles and experiences. Our teachers plan for children to learn traditional folk music and games while also providing opportunities to appreciate classic music from around the world.

Visual Art experiences involve children truly focusing on the process of creation rather than on a product. Visual Art can be a means of communicating understanding that isn't reliant on spoken language. You will see a variety of art process documented in our hallways and rooms, in children's portfolios, and in what they bring home. Asking questions that help children describe their process and what they were thinking about encourages them to describe their processes to you.

Visual/Spatial

Visual/spatial thinking is the ability to perceive visual information in the environment, to represent it internally, to integrate it with other senses and experiences, to derive meaning and understanding, and to perform manipulations and transformations on those perceptions. It is the first language of the brain.

Teachers, parents and siblings who are able to “hear” what children are saying through their block and construction work can learn about what they know and are interested in.

People with highly developed visual/spatial skills pay more attention to the world around them. They notice and appreciate the details of life: the architecture of the buildings in their towns, the kinds of trees in their neighborhoods, the ugly litter that mars the countryside. Visual/spatial skills give people the ability to negotiate well in space: to follow maps, move easily through a forest trail, or maneuver a car into a tight parking space. People need highly developed visual/ spatial skills to work in fields such as architecture, engineering, mathematics, geology, sculpture, computer science, aviation, forestry or cartography, but all people, regardless of profession, benefit from strengthening their visual/spatial thinking.

People with highly developed visual/spatial skills are able to make sense of the bombardment of visual information all around us by “sorting out” the distracting images and focusing on the beauty in nature or pleasing architectural detail. Those who haven’t learned to do so often stop paying attention to the details in the world around them as a way to guard against visual overload.





Our mission is to inspire children, families and educators to connect more deeply with the world around them.

Dimensions Education Programs

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