

## **Developmental Outcomes in ECE Programs**

From the moment a baby takes its first breath, infants begin learning at a very rapid pace and their brain is going through many changes, including learning and development. In the first five years, the learning that occurs become significant factors in a child's future health, happiness, growth, development, and learning. This is not limited to the school setting because this learning process carries over to the family, community and life in general. In those 1,825 days, the roadmap of the rest of their life is established with a degree of eagerness and excitement that won't ever be replicated in another time period. Structured early childhood education (ECE) programs are designed to take the developmental aspect of a child's learning, while focusing on all of the various aspects of developmental milestones that must be achieved.

The experiences that a child has in the first three years are the most critical as they develop a sense of trust and security that then gives them confidence in future learning processes. Statistics show that in the first five years, about 90% of a child's brain becomes developed. This time frame also defines 85% of a child's intellect, personality, and social skills. It has also been identified through research that there are critical periods of learning, or windows of opportunity, with a significant amount of these falling in this same timeframe (Carr, 2012).

While one might think that early childhood education programs only benefit academic learning, one must not overlook the other benefits to a child that are gained through this process. These include emotional, social, behavioral, fine and gross motor and overall personality.

Academic learning is one of the core activities that are part of early childhood learning environment. Literacy, the ability to read and write, is a key milestone that begins early on in a child's life. This begins through listening to the voice of parents and others within the family unit and observing how conversation and language is being used within one's life. As these skill sets become more formal, the learning process of how language works is built upon in the concepts of early literacy. The developmental aspect of literacy begins with simple concepts that a child must know before they are able to read and write, which includes letter recognition, knowledge of these letters, the sounds that letters make and how they form words. These concepts then form vocabulary development, to build the picture of a story. Studies have shown that children, who are good readers and develop good literacy skills at an early age, will perform better in school and will become lifelong learners (Bird, 2013).

Another way in which children learn about the world around them is through math, which is present in more aspects of life than one would realize. The Math Counts program defines math as the observation, identification, description and explanation of numbers, space, relation and

order. Counting, measuring, problem solving, reasoning and identifying shapes and patterns are typical activities that are part of ECE programs. There are many creative ways that math concepts can be infused into the learning process. These may include creative stories that can capture the interest of children, individual or group play activities, artistic activities and traditional paper and pen activities. Some creative examples include student's birthdays, counting and comparing activities, and measurement of everyday items in the classroom or in and around the school. Often times musical activities can also be created around academic concepts such as number sequencing. Literacy and reading concepts are often very effective ways to combine this aspect of learning math concepts also.

Science concepts within the ECE learning process is best achieved through relating these content areas to the world around them. Basic science experiments can be great ways to pique the interest of young children and help them learn about everyday things. For example, what foods have seeds; dissolving skittles in warm and cold water to determine which one would dissolve faster; dipping the stem of flower into colored water to show how a flower gets its nutrients after being cut.

Understanding the community that you live in and how you fit into the community is a great way to begin learning the early concepts of social studies. It is very important for children to know their full name, who their parents are, their phone number and their address. Helping to learn these

important pieces of information gives opportunity to explore how one small house and address, can make up a larger town and state. Using other family members who do not live in the same state is also a way to help children learn that the world gets bigger and bigger.

Along with the academic aspect of ECE, the social and emotional development that occurs is critical to development. Teaching a child to function well in a ECE classroom creates perfect opportunities for social and emotional teaching. Whether learning independently, with a small group, with children of the other gender, and in the full classroom teaches skills that become life-long. Listening well, along with speaking to others in all aspects of the classroom are skills that are necessary throughout life. Building positive relationships, developing a sense of trust and learning to deal with challenges can be taught at a very early age in ECE programs.

Developmental milestones of a child also include fine and gross motor skills and can be built into many learning activities. Whether through desk work, art, coloring, matching, counting, etc. the development of motor skills can be strengthened. Incorporating a wide variety of movement and learning helps to achieve coordination of body movements, a greater understanding of spatial relations and can create stimulation to different parts of the brain. Creative play and the utilization of all of the body's senses will also enhance the learning process that becomes part of a successful ECE program. Teaching the importance of physical activity also

Shaylynn Mack  
EDU 215

provides health-related benefits that will positively influence a child's learning (Gabbard & Rodrigues).

The positive aspects of ECE programs and the opportunities that these programs present are best summed up by the statement "rich environments produce rich brains". Incorporating age appropriate and exciting opportunities for learning results in positive learning that is not otherwise replicated in other ways. Incorporating concepts through play, interaction and fun ways, increases retention of material. Creating intentional instruction and blending this with classroom play optimizes the learning process. ECE programs are a fantastic way to add to the learning that is done for a child, in addition to the learning that is done in a family home. Focusing these activities during a period of time when the brain is developing at its fastest rate, is optimal. Missing this opportunity for the world's most valuable resource, the children of our future, is part of a goal that all educators should strive to achieve.

## Bibliography

- Bird, K. (2013). 3 Ongoing trends in early childhood education and how they impact you. Retrieved November 1, 2015, from <http://www.rasmussen.edu/degrees/education/blog/3-ongoing-trends-early-childhood-education-impact-you/>
- Bodrova, E. (2008) Make-believe play versus academic skills: a Vygotskian approach to today's dilemma of early childhood education, *European Early Childhood Education Research Journal*, 16:3, 357-369, DOI: 10.1080/13502930802291777
- Carr, J. (2012, July 1). Critical periods. Retrieved November 1, 2015, from <http://www.brainfacts.org/brain-basics/brain-development/articles/2012/critical-periods>
- Gabbard, C., & Rodrigues, L. (2008). Optimizing early brain and motor development through movement. Retrieved November 1, 2015, from [http://www.earlychildhoodnews.com/earlychildhood/article\\_view.aspx?ArticleID=360](http://www.earlychildhoodnews.com/earlychildhood/article_view.aspx?ArticleID=360)
- Skarda, E. (2014, July 2). Ask the experts: How can we fix early childhood education? Retrieved November 1, 2015, from <http://nationswell.com/ask-experts-can-fix-early-childhood-education/>