

# **Child Growth and Development**

## **Participant's Guide**



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FLORIDA DEPARTMENT  
OF CHILDREN AND FAMILIES  
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# Child Growth and Development Participant's Guide

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# **Child Growth and Development**

## **Module 1: Principles of Child Growth and Development**

### **Overview**

This module introduces the basic principles of child growth and development and brain development. It also includes implications for child care professionals and implications for learning.

### **Module Goal**

Participants will understand the basic principles of child growth and development and how these principles apply to children's learning.

### **Learning Objective**

After successfully completing this module, you will be able to:

- Explain the difference between growth and development
- Describe each of the basic principles of child growth and development
- Provide at least one implication of a developmental principle as it relates to child learning





## Basics of Child Growth



### **Activity: Sharing Questions**

In your participant's guide, write at least two goals or expectations for this course. The goal or expectation should reflect what you are hoping to learn by the end of the course.

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What is one question you have about the content of this course on child growth and development?

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We often hear people refer to children's growth and development. Are "growth" and "development" the same thing? What do each of these terms mean?

- \_\_\_\_\_ refers to specific body changes and increases in the child's size, such as a child's height, weight, head circumference, and body mass index. These size changes can usually be easily measured.
- \_\_\_\_\_ typically refers to an increase in complexity, a change from relatively simple to more complicated. Development usually involves a progression along a continuous pathway on which the child acquires more refined knowledge, behaviors, and skills. The sequence is basically the same for all children, however, the rate varies.



## Principles of Child Growth

We define growth as specific \_\_\_\_\_ changes and increases in the child's size.

During the first year of an infant's life, babies can grow ten inches in length and triple their birth weight. After the first year, a baby's growth in length slows to five inches a year for the next two years and then continues from age two or three to puberty at a rate of two to three inches each year. A major growth spurt occurs at the time of puberty.

- Girls generally enter puberty between eight and thirteen years of age.
- Boys usually enter puberty between ten and fifteen years of age.

Similarities in growth:

- Growth proceeds from the \_\_\_\_\_ downward and from the center of the body outward.
- Children gain control of the head and neck first, then the arms, and finally, the legs.
- At birth, the brain, heart, and spinal cord are fully functioning to support the infant.
- As children grow, the arm and leg muscles develop, followed by the finger and toe muscles.

Differences in growth:

- Some children are taller, some shorter. Some children are smaller, while others are larger.
- These differences are completely typical. Typical growth is supported by good nutrition, adequate sleep, and regular exercise.
- Children do not grow at perfectly steady rates throughout childhood.
- Children will experience weeks or months of slightly slower growth, followed by growth spurts.
- Differences in the amount of growth can be a source of self-consciousness for some children.

It is important to help the children in your care understand that differences in growth patterns are \_\_\_\_\_. Because each child is different and special, it is important to help them understand this concept in order to develop a sense of self-acceptance.

If you detect that a child is self-conscious about his/her size, how would you help him/her work on increasing his/her self acceptance?

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If you have some concern about a growth-related issue involving a child, how would you approach this issue with the parent(s)?

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**Key Point:** Growth is defined as specific body changes and increases in the child's size, proceeding from the head downward and from the center of the body outward.



## Principles of Child Development

 **Key Point:** Development refers to an increase in complexity; a change from relatively simple to more complicated.

 **Key Point:** Development usually involves a progression along a continuous sequential pathway on which the child acquires more refined knowledge, behaviors, and skills.

 **Key Point:** The developmental sequence is basically the same for all children; however, the rate of development varies from child to child.

### Principle 1-Developmental Sequence is Similar for All

- Children develop in relatively the same ways.
- There is a typical sequence of development that occurs as a child grows.
- While the sequence is similar, and the behaviors or skills emerge in the same order, children can take more or less time with each behavior or skill.
- They can move forward, regress for a short time, then move forward again.
- Some children may skip a behavior or skill as they move forward.

Notes:

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### Principle 2-Development Proceeds from General to Specific

- Development progresses from a beginning point moving in a forward direction.
- Just as growth of an infant proceeds from the top down and from the center of the body to the limbs, development of behaviors and skills moves from general to specific.
- As children mature, their bodily changes occur in a sequential order and give children new abilities.
- As the brain and nervous system develop, a child's thinking (cognitive) skills and motor skills improve.
- In the Physical Development Domain, an infant's large muscles develop first and result in the ability to wave the arms and kick the legs.
- Development continues in the smaller muscles in the fingers and toes, and results in the ability of the fingers to grasp objects and the toes to help with balance when standing and walking.

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### Principle 3-Development is Continuous

- In children who develop typically, behaviors and skills they have already acquired become the basis for new behaviors and skills.
- There is continuity from one phase of development to the next.
- Children continue to add new behaviors and skills as they perfect their abilities to walk, to write or draw, and to speak. For example, speech development proceeds from gurgles and coos to chattering, then to words, then phrases, and finally, sentences. Sentences become paragraphs and stories, both oral and written.
- In order for children to write or draw, they must have developed the control of their hands and fingers to hold a crayon and pencil. Holding a pencil develops into writing and drawing.
- The continuation of development can easily be seen in children as they mature from age two to age twelve.

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### Principle 4-Development Proceeds at Different Rates

- Each child is different and the rates at which individual children develop are different.
- Although the sequences for development are usually the same for all children, the rates at which individual children reach each stage will be different.
- Some children will walk at ten months of age, while others walk at eighteen months of age.
- Development is never uniform, but it is constant.

Notes:

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Principle 5-All Areas of Development are Interrelated

- Development in children is interrelated.
- There are several examples in Principles 1 through 4 that show how the body has to grow and develop before new behaviors and skills can occur.
- These examples also demonstrate the first two of eight areas of development, called domains.
- These eight domains of development are Physical Development, Approaches to Learning, Social and Emotional Development, Language and Literacy, Mathematical Thinking, Scientific Inquiry, Social Studies, and Creative Expression Through the Arts.
- Each area of development influences development in other areas.

Notes:

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## Implications for Child Care Professionals



### **Activity: A Day in the Life**

Fill in the schedule with the appropriate time for each event.

\_\_\_\_\_ Child wakes up in the morning.

\_\_\_\_\_ Child is driven to their child care program.

\_\_\_\_\_ Parent picks their child up from the child care program.

\_\_\_\_\_ Child is fed dinner.

\_\_\_\_\_ Child is given a bath.

\_\_\_\_\_ Child is put to bed.

- How much time does this child spend in interaction with a parent?

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- How much opportunity does the parent get to observe the child's growing repertoire of skills?

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**Key Point:** Child care professionals may spot developmental issues before the parents do, which is why it is important to understand the basic child growth and development principles.

For more information about screening for developmental delays, take the Department of Children and Families' course *Behavioral Observation and Screening* or *Special Needs Appropriate Practices*.



## Implications for Learning

Why should child care professionals learn about principles of child development?

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**Key Point:** All of your interactions with a child have an effect on the child's development and learning, which means it is important to be aware of what the child is learning while in your care.



## Module 1 Summary

Here is a summary of key points for **Module 1: Child Growth and Development Overview**.

Growth is defined as specific body changes and increases in the child's size, proceeding from the head downward and from the center of the body outward.

Development refers to an increase in complexity; a change from relatively simple to more complicated.

Development usually involves a progression along a continuous sequential pathway on which the child acquires more refined knowledge, behaviors, and skills.

The developmental sequence is basically the same for all children; however, the rate of development varies from child to child.

Child care professionals may spot developmental issues before the parents do, which is why it is important to understand the basic child growth and development principles.

All of your interactions with a child have an effect on the child's development and learning, which means it is important to be aware of what the child is learning while in your care.



## Module 1 Conclusion

You have completed **Module 1: Child Growth and Development Overview**.

You have achieved this module's learning objectives if you can:

- Explain the difference between growth and development
- Describe each of the basic principles of child growth and development
- Provide at least one implication of a developmental principle as it relates to child learning

# **Child Growth and Development**

## **Module 2: Child Development Theories**

### **Overview**

This module will introduce the child development theories of Abraham Maslow, Erik Erikson, Jean Piaget, Lev Vygotsky, and Maria Montessori. Each of these developmental scientists formulated theories about how children learn and grow.

### **Module Goal**

Participants will understand the main ideas from the child development theories of Maslow, Erikson, Piaget, Vygotsky, and Montessori; and will understand the implications of these theories for children's learning.

### **Learning Objective**

After successfully completing this module, you will be able to:

- Identify the theorist associated with each child development theory
- Summarize the main ideas of each child development theory
- Explain at least one implication of each child development theory as it relates to children's learning





## Module 2 Introduction

In this module, the main ideas from the child development theories of Maslow, Erikson, Piaget, Vygotsky, and Montessori will be presented. Each of these theories have implications for children's learning.

What is a theory?

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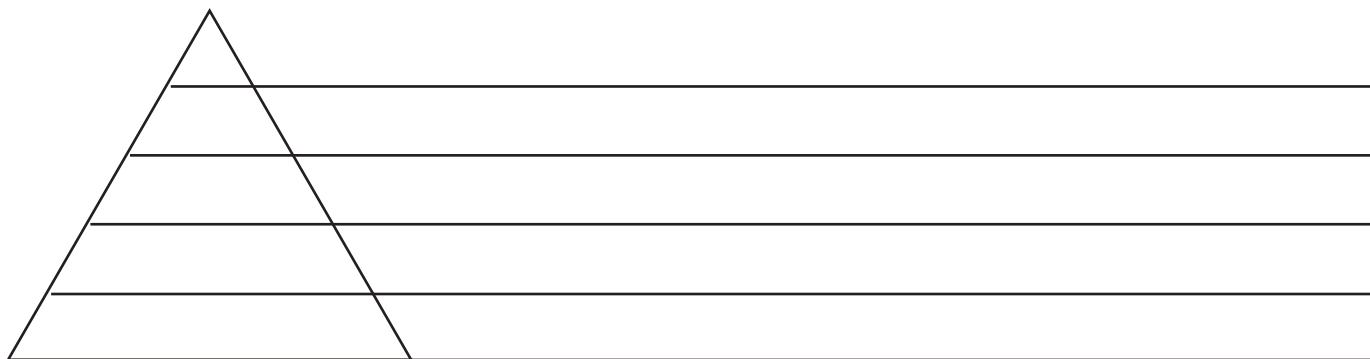
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## Abraham Maslow and the Hierarchy of Needs

Maslow's hierarchy of needs:

- Maslow developed a hierarchy of \_\_\_\_\_.
- Maslow's hierarchy has \_\_\_\_\_ levels, is pictured as a pyramid, and goes from bottom (human need number 1) to top (human need number 5).
- Satisfying the needs on the second level depends upon the first level needs being satisfied.



**Abraham Maslow: Hierarchy of Needs**

LEVEL	HUMAN NEED	EXAMPLES
1	<b>Physical</b> <ul style="list-style-type: none"><li>• Air to breathe</li><li>• Shelter to protect</li><li>• Water to drink</li><li>• Food to eat</li><li>• Clothes to wear</li></ul>	<ul style="list-style-type: none"><li>• Rest, sleep</li><li>• Food, water, formula</li><li>• Shelter, heat, beds</li><li>• Health care</li><li>• Employment or income</li><li>• Clothes</li></ul>
2	<b>Comfort and Safety</b> <ul style="list-style-type: none"><li>• Safety</li><li>• Security</li><li>• Stability</li></ul>	<ul style="list-style-type: none"><li>• Transportation</li><li>• Neighborhood</li><li>• Safe relationships (not domestic violence, abuse)</li><li>• Child care</li></ul>
3	<b>Social</b> <ul style="list-style-type: none"><li>• Belonging</li><li>• Love and Attention</li><li>• Acceptance</li></ul>	<ul style="list-style-type: none"><li>• Sense of belonging, of being connected</li><li>• Adult-adult affiliation, companionship (significant other)</li><li>• Parent-child relationship</li><li>• Positive relationships with extended family</li><li>• Positive informal social support network</li><li>• Positive formal social support network</li></ul>
4	<b>Self-Esteem</b> <ul style="list-style-type: none"><li>• Adequacy</li><li>• Confidence</li><li>• Importance</li></ul>	<ul style="list-style-type: none"><li>• Sense of competency as parent, worker, significant other</li><li>• Sense of efficacy, capability</li><li>• Sense of resiliency, hopefulness</li><li>• Ability to cope and problem solve</li><li>• Sense of well-being (individual to family levels)</li><li>• Opportunities for enjoyment</li></ul>
5	<b>Self-Actualization</b> <ul style="list-style-type: none"><li>• Fulfill one's life with purpose and meaning</li><li>• Being all that one is able to be</li></ul>	<ul style="list-style-type: none"><li>• Spirituality</li><li>• Personal emotional response</li><li>• Refinement of interpersonal skills (empathy, communication, relating)</li><li>• Enhancement of understanding of relationships with child(ren), family, community, self</li></ul>

What does the hierarchy of needs mean to you as a child care professional?

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**Key Point:** Maslow's Hierarchy of Needs includes five levels: Physical, Comfort and Safety, Social, Self-Esteem, and Self-Actualization.



**Key Point:** Maslow's theory states that an individual must have their lower-level needs met before higher-level needs can be accomplished.



**Key Point:** Successfully meeting the needs at each level in the hierarchy of needs results in fulfilling the purpose and meaning of one's life.

Here are some hints to help you remember Maslow's theory.

- If you close the "M" at the bottom, it will form triangles or pyramids.
- Maslow studies human needs.
- What motivates children to act the way they do? Needs being met.



## Erik Erikson and the Eight Conflicts in Emotional Development

Erik Erikson developed \_\_\_\_\_ psychosocial stages through which humans develop during their lifetimes.

Erikson describes emotional development as a series of eight stages, called \_\_\_\_\_, which must be "resolved" before proceeding to the next conflict.

Moving successfully through these conflicts ensures that an individual becomes \_\_\_\_\_ and \_\_\_\_\_ stable.

(See chart on next page.)

What does Erikson's theory mean to a child care professional? How can you, as a child care professional, support a positive outcome in each of the first four conflicts?

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**Key Point:** Erikson's theory on emotional and personality development describes eight conflicts that must be resolved at stages throughout life.

Here are some hints to help you remember Erikson's theory.

- E. Erikson contains 8 letters---8 stages.
- E. E. = two "E's" playing together---social behaviors.
- Focus on emotional and personality development.
- Major conflict at each stage and how they are dealt with affect development.

Trust vs. Mistrust	birth to 1 year	(I am all right.)
Autonomy vs. Shame and Doubt	1 to 3 years	(I can make choices.)
Initiative vs. Guilt	4 to 5 years	(I can do and I can make.)
Industry vs. Inferiority	6 to 12 years	(I can do it well and be successful.)

## **Erik Erikson (Psychosocial): Eight Emotional Conflicts**

<b>AGE</b>	<b>CONFLICT</b>	<b>MEANING</b>
Infant	Trust vs. Mistrust	<ul style="list-style-type: none"> <li>• Trust is developed over time by providing an infant with a consistent, comforting environment.</li> <li>• When needs are met, trust is established.</li> <li>• Trust builds an emotional foundation.</li> <li>• A lack of trust can result in poor emotional stability.</li> </ul>
Toddler	Autonomy vs. Shame and Doubt	<ul style="list-style-type: none"> <li>• Toddlers need to explore their own bodies and environment in order to become confident about themselves.</li> <li>• When autonomy is allowed, a person can become comfortable with his/her choices.</li> <li>• A lack of autonomy can result in a feeling of shame or insecurity.</li> </ul>
Preschool	Initiative vs. Guilt	<ul style="list-style-type: none"> <li>• Four- or five-year olds begin to develop an interest in exploring beyond themselves.</li> <li>• Children who are not allowed to pursue their natural curiosity will be prone to feel guilt for their actions.</li> <li>• When initiative is encouraged, a person experiments within one's environment.</li> <li>• A lack of encouragement for initiative can result in a feeling of guilt for acting on one's natural curiosity.</li> </ul>
Grade School	Industry vs. Inferiority	<ul style="list-style-type: none"> <li>• Between the ages of 6 to 12, children show the ability to develop competencies. Children who are inhibited in developing these skills and abilities will experience inferiority.</li> <li>• When children experience success, they attain a sense of adequacy and pride.</li> <li>• A lack of industry can result in a feeling of low self-worth.</li> </ul>
High School	Identity vs. Role Confusion	<ul style="list-style-type: none"> <li>• Between the ages of 12 to 18, children are attempting to define who they are and where they are going.</li> <li>• When children are given the opportunity to develop their own ideas and opinions, they can form their own identity.</li> <li>• A lack of identity will lead to confusion about who they are.</li> </ul>
Early Adult	Intimacy vs. Isolation	<ul style="list-style-type: none"> <li>• Between the ages of 18 to 35, young adults are exploring the development of relationships.</li> <li>• Young adults need the opportunity to develop close relationships with family, friends, and partners.</li> <li>• A lack of intimate relationships can lead to individuals feeling isolated and alone.</li> </ul>
Middle Adult	Generativity vs. Stagnation	<ul style="list-style-type: none"> <li>• Between the ages of 35 to 64, adults are seeking a sense of accomplishment in life through family and career.</li> <li>• Adults need to see progress in their careers or success in their contributions to society.</li> <li>• A lack of accomplishment often leads to feelings of resentment and regret.</li> </ul>
Late Adult	Integrity vs. Despair	<ul style="list-style-type: none"> <li>• After the age of 65, adults seek meaning in their lives.</li> <li>• Adults are reflecting on their accomplishments and fulfillment in life.</li> <li>• A lack of achievement may lead to despair in the final years.</li> </ul>



## Jean Piaget and the Four Stages of Cognitive Development

- Piaget was interested in learning how children develop an intellectual understanding of the world.
- His theory was based on the concept of cognitive structures.
- Cognitive structures are patterns of physical or \_\_\_\_\_ action that inspire acts of intelligence and correspond to stages of child development.
- Piaget assumes that humans take the information they receive and process it, then react to it.
- According to Piaget, children develop the ability to learn in \_\_\_\_\_ basic stages.
- In each of Piaget's stages, development focuses around acquiring a different set of characteristics and abilities.

### Jean Piaget: Cognitive Development

STAGE	AGE	SIGNS
Sensorimotor	0-2 years	Children learn through sensory perception and motor activity.
Preoperational	2-7 years	Children are bound by what they experience directly and not by what they think. Children begin to use symbols (one thing that represents another). For example, using sand to make a cake. Children are egocentric; their thinking centers on themselves. They can't see things from another point of view or from another perspective. For example, they do not realize that when they stand in front of the TV, no one else can see it.
Concrete-Operational	7-11 years	Children become more rational in their thinking. For example, realizing that Santa Claus probably doesn't exist.
Formal Operations	11 + years	The final stage of cognitive development, in which thinking becomes very abstract. Children think beyond the present and think about ideal situations.

How can child care professionals use the information from Piaget's theory?

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**Key Point:** Piaget's four stages of cognitive development explain how children interact with their environment to construct knowledge.



**Key Point:** Each of Piaget's stages represents a change from one type of thought or behavior to another and builds on the stage before.

Here are some hints to help you remember Piaget's theory.

1. First name, Jean...4 letters...4 stages.
2. 4 Stages:
  - Sensorimotor – sensory perception
  - Pre-operational – thinking is based on how things are perceived rather than logic
  - Concrete Operational – thinking is rational
  - Formal Operations – thinking becomes abstract



## Lev Vygotsky and the Theory of Cognitive Development

- Lev Vygotsky developed the \_\_\_\_\_ development theory of learning.
- Vygotsky theorized that social and cultural interactions are the primary sources of learning and behavior
- Children acquire knowledge through culture.
- Children learn through problem-solving experiences shared with a knowledgeable adult or peer. Initially, the person interacting with the child assumes more responsibility for guiding the learning. As the child learns, the responsibility is gradually transferred to him/her. This is an instructional technique called \_\_\_\_\_.
- A difference exists between what a child can do on his/her own and what he/she can do with the help of a knowledgeable adult or peer. A child can perform a task under adult guidance, or with peer \_\_\_\_\_, that he/she could not achieve alone. Vygotsky called this the \_\_\_\_\_ and claimed that learning occurred in this zone. In summary, Vygotsky focused on the connections between people and the culture in which they interact.

How can child care professionals use the information from Vygotsky's theory?

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Vygotsky's process has four main strategies for success. They are:

- Generating a question for understanding
- Clarifying that they are understanding what they are reading
- Stopping to predict from clues what they think will happen in the learning material
- Summarizing what they have learned



**Key Point:** Vygotsky's sociocultural theory of cognitive development focuses on the connections between people and the culture in which they interact.

Here are some hints to remember Vygotsky's theory:

- Think of Victor on a bicycle. As he learns to ride he has help at first and then less and less as he becomes more skilled.
- Adults & other children help him learn.
- As he grows he will improve this skill and use it to develop new skills.



## Maria Montessori and Child-Centered Learning Environments

Maria Montessori believed that children should be able to work independently in a clean, beautiful, and organized environment filled with child-sized materials, and caregivers who help children understand order and responsibility.

- Emphasis is placed on the preparation of the learning environment. This includes the space children use; and the furnishings, materials, children, and adults who occupy the environment.
- The learning environment should be beautiful and orderly. This allows children to learn about order from the learning environment.
- Furniture, tools, materials, and toys should be child-sized.
- Children learn best by having sensory experiences.
- Children should be provided with tools that work.
- Materials should be organized and accessible to children. They should be allowed to find what they need and return it when finished.

How can you implement the theories of Montessori in your child care environment?

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**Key Point:** Maria Montessori's theory focuses on the child's independence in order to engage them in a developmentally appropriate learning environment so they can advance their developmental skills.



## Attachment Theories and the Importance of Quality Infant Care

As a caregiver, you serve a critical role in the development of young children that can impact all stages of life, including stages that progress into adulthood. It is extremely important, especially when working with infants and young children, that the impression you have on them is as positive and supportive as possible.

John Bowlby's research indicated that infants and young children need attentive, responsive adults in order to develop into well-adjusted individuals through the following stages of their lives, including adulthood. Failure to provide these experiences for children may lead to mental health problems later in life. As a caregiver, it is one of your most important responsibilities to ensure that all children in care feel loved and attended to.

Further, child care professionals are in a unique position to soothe and comfort infants during times when their parents and caregivers are experiencing stress.

All of these factors lead to an important conclusion; that caregivers have the opportunity to form very significant bonds with children. This caregiver-child bond creates the foundation for the child's self-esteem and prevents potential mental health issues later in life.

 **Key Point:** Children who are able to form close relationships with adults during their early years develop a good sense of self-esteem and have a smaller chance of developing mental health problems later in life.



## Module 2 Summary

Here is a summary of key points for **Module 2: Child Development Theories**.

Maslow's Hierarchy of Needs includes five levels: Physical, Comfort and Safety, Social, Self-Esteem, and Self-Actualization.

Maslow's theory states that an individual must have their lower-level needs met before higher-level needs can be accomplished.

Successfully meeting the needs at each level in the hierarchy of needs results in fulfilling the purpose and meaning of one's life.

Erikson's theory on emotional and personality development describes eight conflicts that must be resolved at stages throughout life.

Piaget's four stages of cognitive development explain how children interact with their environment to construct knowledge.

Each of Piaget's stages represents a change from one type of thought or behavior to another and builds on the stage before.

Vygotsky's sociocultural theory of cognitive development focuses on the connections between people and the culture in which they interact.

Maria Montessori's theory focuses on the child's independence in order to engage them in a developmentally appropriate learning environment so they can advance their developmental skills.

Children who are able to form close relationships with adults during their early years develop a good sense of self-esteem and have a smaller chance of developing mental health problems later in life.



## Module 2 Conclusion

You have completed **Module 2: Child Development Theories**.

You have achieved this module's learning objectives if you can:

- Identify the theorist associated with each child development theory
- Summarize the main ideas of each child development theory
- Explain at least one implication of each child development theory as it relates to children's learning

# **Child Growth and Development**

## **Module 3: Influences Affecting Child Growth and Development**

### **Overview**

This module will introduce a variety of topics related to influences that affect growth and development in children. Brain development, heredity, health, wellness, developmental obstacles, and the importance of routines will all be discussed throughout this module.

### **Module Goal**

Participants will recognize the roles of heredity, health, wellness, developmental obstacles, and the importance of routines and their effects on a child's growth and development.

### **Learning Objective**

After successfully completing this module, you will be able to:

- Describe characteristics that influence child growth and development
- Explain how child care professionals can support children with developmental disabilities





## Overview

Knowledge of child development is essential to effectively work with children.

Since we know that children develop at different rates, it is important to understand the various influences that have an effect on the way children develop. These include internal factors, such as heredity and health status; and external factors, such as environment, which has a great influence on a child's development. As a caregiver, it is important to be knowledgeable on these subjects in order to recognize a child who is not yet showing the behaviors that are expected at a certain age. Such a child may be in need of professional help, such as speech therapy, vision correction, physical therapy, or hearing aids. Being knowledgeable about typical child development serves to guide your work with children and aid you in making appropriate decisions about activities and expectations for the children in your care.

 **Key Point:** Being knowledgeable about typical child development, as well as the factors that affect development, allows you to tailor the activities and expectations for the children in your care.



### Activity: Remembering a Favorite Book

One of the most influential experiences in childhood is books. Learning to love to read sets the stage for lifetime learning. Think about a book that you loved when you were a child. Take a moment to write down the title of the book and what you enjoyed about it.

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It is easy to see the impact that a single book can have on a child. This is merely one influence on a child's development. Throughout this module, we will explore a few more influences that affect the way children grow and develop throughout their childhood.



## Brain Development

There are approximately 100 billion brain cells at birth, but there is minimal “wiring” between them. This wiring connection between nerve cells is called a synapse. Synaptic connections are being formed throughout the brain during life. Early on, these new pathways are simple, vulnerable, and growing rapidly. Later, the brain begins to surround the synapse with a kind of insulation that offers some protection to the connections.

Messages between synapses are sent electrochemically. The chemicals involved seem to be specialized and indicate pleasure, pain, or alarm. Stimulation and experience determine what synaptic connections are initially formed. Stimuli that are encountered early and often, as well as the child’s successful responses, get “wired” into the brain. Practice and repetition help determine the strength and durability of a connection. The saying “use it or lose it” applies to brain development.

Much of a baby’s early repertoire of responses is exercised at random. Responses that seem to bring about a pleasurable outcome are tried again. Responses that seem ineffective are eventually abandoned. Some synaptic pathways are strengthened and others are disused and shut down.

There are times in a child’s growth that are referred to as “developmental windows.” These are certain periods of time when children are especially receptive to their surroundings and interactions with other people. These periods of time are tied to brain development and readiness for learning that will directly affect the achievement of developmental milestones. For example, language skills depend on hearing other people speak. If there is not adequate verbal stimulation in the first years of life, language skills—especially grammar and pronunciation—are negatively affected. This is critically important for young children, since the window of opportunity for learning language skills begins to close around five years old and greatly diminishes around puberty.

There is a lot going on in the brain between birth and age three. The brain of a newborn baby will undergo an incredible amount of growth and change. At birth, the brain stem and spinal cord are developed and control vital bodily functions, such as breathing and heartbeat; they also control the kicking, crying, sleeping, and feeding that are characteristic of infants. The rest of the brain will undergo considerable development as the infant grows; the growth is influenced by the baby’s environment and experiences.



## Brain Gym

Just as your muscles need to be exercised to keep them strong, your brain also needs a workout to ensure it is performing at its full potential. The simple Brain Gym exercises below are based on the work of Dr. Hannaford.

In her book *Smart Moves: Why Learning is Not All in Your Head*, Dr. Hannaford states that our bodies are very much a part of all our learning. Learning is not an isolated “brain” function. Every nerve and cell in the body is a network contributing to our intelligence and our learning capability. The following Brain Gym exercises implement the ideas developed in *Smart Moves* and can be used quickly in any child care environment. They can be used before and during any learning activity. They are surprisingly simple, but very effective.

### Brain Buttons

This exercise helps improve blood flow to the brain to “switch on” the entire brain before learning begins. The increased blood flow helps improve concentration skills required for learning.

1. Position one hand so there is as wide a space as possible between the thumb and index finger.
2. Place the index finger and thumb of this hand into the slight indentations below the collarbone on each side of the sternum. Press lightly in a pulsing manner.
3. At the same time, put the other hand over the navel area of the stomach.
4. Gently press on these points for about two minutes.

### Cross Crawl

This exercise helps coordinate the right and left sides of the brain by exercising the information flow between the two sides. It is useful for learning beginning skills; as well as spelling, writing, listening, reading, and comprehension.

1. Stand or sit.
2. Put the right hand across the body to the left knee as you raise it, and then do the same thing for the left hand on the right knee, as if you were marching.
3. Continue this motion for about two minutes.

### Hook-Up

This works well for nervousness before a special event, such as speaking in front of the class. Any situation that will cause nervousness calls for a few “hook-ups” to calm the mind and improve concentration.

1. Stand or sit. Cross the right leg over the left at the ankles.
2. Take your right wrist and cross it over the left wrist, then link up the fingers so the right wrist is on top.
3. Bend the elbows out and gently turn the fingers in towards the body until they rest on the sternum (breastbone) in the center of the chest. Stay in this position.
4. Keep the ankles crossed and the wrists crossed, then breathe evenly in this position for a few minutes. You will be noticeably calmer after that time.

## Drink Water

The human brain is composed mostly of water. This means that staying hydrated is paramount to ensuring high brain performance. Encouraging children to drink water during the day helps them stay hydrated. Drinking water is very important before any stressful situation; we tend to perspire under stress or when actively playing or exercising. Dehydration can negatively affect concentration. Ensuring that children stay hydrated is especially important when children experience stress due to learning new concepts, taking tests, or facing deadlines.



**Key Point:** Using physical activities, such as Brain Gym, helps stimulate the brain to ensure it is alert and receptive to absorbing new information and concepts.



## Heredity Impacts on Child Development

### What is Heredity?

- Heredity is the passing down of genetic characteristics from parents to their children.
- It influences a child through the inheritance of physical characteristics and temperament from birth parents at the time of conception.
- Hereditary factors may place certain limitations on a child, but they may also provide great capabilities.
- Some children inherit characteristics that help their development, such as ability with language and strong bones.
- Others inherit characteristics that can hinder development, such as health conditions; while some inherited characteristics have no influence on development, such as eye and hair color.

### Temperament and Personality

- Temperament describes the emotional response of a child.
- Temperament is different from personality.
- Temperament is a prevailing or dominant quality that characterizes a person, such as emotional or fussy.
- Personality is the totality of a person's attitudes, interests, behavioral patterns, emotional responses, social roles, and individual traits that endure over a long time.



**Key Point:** Heredity is the blend of physical and temperamental characteristics inherited by a child from the birth parents, which affect their personality and may have positive or negative influences on a child.



## Hereditry, Environment, and Child Development

A child's heredity has an effect on their development. Early experiences in the environment also affect brain structure. Together, these help determine the child's brain growth and potential. Children are a product of their genetics and their experiences. "Nature" refers to their genetics, and "nurture" refers to their environment and experiences. Both nature and nurture determine how children develop.

Negative experiences create one set of connections in the brain and positive experiences create a different set. An infant who is often picked up and cuddled and "coo-ed to" might learn to call attention to himself/herself when he/she wants to be comforted. A different infant who is essentially ignored might learn that he/she cannot count on his/her caregiver to meet his/her needs.

What types of activities and interactions with children have an effect on their development and learning?

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- How you diaper, feed, and put them to sleep
- The way you greet children and the way you comfort them
- The amount of space the child has to play in, and the ambient lighting
- The songs you sing
- The toys you provide
- The meals you serve
- Your attitude and cheerfulness

These things, and more, all have an effect on the development of a child's brain and their ability to socialize and learn.



**Key Point:** Everything you do in the child care setting has an effect on the children's development and learning.



## Health and Wellness Factors Influencing Child Development

### Nutrition

- Child care facilities must have a food and nutrition policy.
- All food must be properly stored and handled, and be free from spoilage and contamination.
- The Choose MyPlate Campaign by the United States Department of Agriculture has a wealth of information about planning appropriate meals and snacks.
- Inspect the food a child brings for lunch or snacks to ensure it is consistent with the food and nutrition policy of your program.
- Talk to parents about their child's food preferences and any food allergies they may have.
- Create a weekly menu and share it with parents to keep them informed about the foods and snacks being served.
- Informing parents daily about the foods and snacks their child ate helps them meet their child's nutritional needs with the meals served at home.

### Physical Activity

- Be sure to allow plenty of time in the daily schedule for indoor and outdoor physical activities.
- Ensure an appropriate environment is available that can accommodate physical play and activities.
- Always maintain close supervision of children at play to ensure safety and prevent injuries.

### Daily Physical Routines

Having a daily routine that includes physical activities is a great way to plan time for children to engage in physical play and get the exercise they need.



**Key Point:** Maintaining a healthy body through proper nutrition and exercise is essential for children's most favorable growth and development.

For more information about the importance of nutrition and physical activity in ensuring proper growth and development in children, take the Department of Children and Families' course *Health, Safety, and Nutrition* or *Obesity Prevention and Healthy Lifestyles*.



## Effect of Health Status on Growth and Development

- A child in good health has a better opportunity to grow with fewer developmental challenges than an unhealthy child.
- The higher the number of illnesses, accidents, injuries, and diseases that affect a child, the more likely it is that the child will encounter a developmental delay.
- Health status has a critical influence on the growth and development of a child beginning in the pre-natal period.
- Factors such as socioeconomic status, gender, and race also seem to affect the health of children.
- Being healthy generally happens when a child eats well, gets plenty of physical activity and exercise, and maintains a healthy weight.
- Developing healthy behaviors early in childhood helps children maintain a healthy lifestyle through adulthood.
- Healthy behaviors that should be encouraged in young children include establishing appropriate sleep and nap periods, understanding and following rules and expectations, exhibiting appropriate behaviors and responses to discipline, showing respect to peers and adults, and practicing good oral and physical hygiene.
- If a child is healthy, their body works well; they feel good; appear happy; and can do many things they want to do, like run, learn, have fun, and play with friends.



**Key Point:** Health status is one of the largest contributing factors that affect a child's ability to grow and develop at a typical rate.



## Childhood Obesity

Childhood obesity is a growing concern for parents and caregivers, as it can lead to a variety of health problems later in life. Obese children can develop heart disease, type 2 diabetes, asthma, sleep apnea, as well as social discrimination. Helping children to establish healthy eating habits and exercise routines allows children to more easily maintain healthy lifestyle trends throughout adulthood.

- While some children may have medical conditions that result in weight gain or loss, the majority of weight gain is the result of too many calories and too little exercise.
- Overexposure to marketing of candy, sodas, and fast food has resulted in children who have inaccurate interpretations of healthy food choices.
- Due to busy schedules, inaccurate nutritional perceptions, and other socioeconomic factors, some parents struggle with providing well-balanced meals for their children.
- Increased access to technology, such as television programming, video games, movies, and computers, can distract children from engaging in appropriate amounts of physical activities and exercise.

There are several practices you can use to assist overweight children. This includes avoiding the technique of using food or candy as a reward, or to encourage behavior. Encouraging children to eat when they are not hungry or to “clean their plate” is an outdated practice; allow children to eat as much or as little as they like. Always have healthy foods, snacks, and drinks available to children. Educate children about healthy food choices. Provide plenty of opportunities for both indoor and outdoor physical activities. Share information with parents about healthy nutritional practices and the importance of daily physical exercise. Discuss possible changes and improvements that parents could make at home.



**Key Point:** Childhood obesity is a growing epidemic that leads to a variety of serious health complications.



# Social Influence on Child Development

## Social Interactions

Social interactions form the basis of our need for belonging, acceptance, and self-esteem. Interacting with peers helps children learn about themselves and others while they establish that they belong as part of a larger group. Interactions with parents and adults help children to learn appropriate behaviors and expectations, which forms the basis for adapting to societal norms.

## Promoting Social Interaction

- Creating situations for children to engage with others, including adults and peers, should be a daily goal of any effective caregiver.
- Design activities that foster social interactions.
- Guided interactions are essential to helping children develop positive peer relationships.
- Encouraging cooperative play teaches children to take turns, to have positive interactions, and to share with and be polite to others.
- Pairing children with others who share common interests helps form bonds and establish self-esteem.
- Children who experience positive interactions during cooperative play will eventually begin to share toys and engage with others without prompting or guidance from adults and caregivers.
- Maintain close supervision during social interactions and cooperative play to monitor children's progress towards social growth.



**Key Point:** Experiencing positive social interactions with both adults and peers establishes the foundation for feelings of acceptance, belonging, and self-esteem.

## Social Interaction and Children with Disabilities

Children with disabilities may sometimes have an increased difficulty engaging in social interactions with their peers.

- Including children with disabilities in a group with typical peers is not sufficient for building social skills, facilitating emotional development, and promoting interactions.
- You can assist all children in developing socially by analyzing the nature of the toys or play activities.
- Ensure that there are a variety of activities children with disabilities can participate in.



## Developmental Obstacles and Child Development

As a child care provider, you should always be on the lookout for signs of developmental delays and be aware of appropriate methods of dealing with children experiencing developmental delays.



**Key Point:** The typical skills and behaviors for children of a certain age range may not be possible for some children who are developmentally delayed.

Developmental obstacles vary widely but all affect development.

Other external influences can also affect development. Certain circumstances, such as having parents who cannot read or who do not talk frequently with their children; or living in homes where English is not spoken, may affect the learning opportunities of a child and the child's ability to relate to others. Also, the quantity and nutritional value of food consumed affects the child's development throughout life.

Overcoming or reducing the effect of developmental obstacles requires teamwork between the child, parents, and the child care professional. Such teamwork can promote more typical development.

A child's family can have an impact on their health status in a variety of ways:

- There are a number of health issues the family controls, such as serving healthy meals, frequency of doctor visits and getting the necessary immunizations.
- Parental responsibility begins with good pre-natal care. Unfortunately, some children are victims of bad choices made by parents.
- One of the more devastating examples of how health status influences child development is the effect of alcohol on the developing child.
  - Fetal Alcohol Spectrum Disorders (FASDs) result in a variety of mental and physical defects that develop in unborn babies when the mother drinks too much alcohol during pregnancy.
  - Growth, skeletal, facial, organ and central nervous system abnormalities can be symptoms of FASDs.
  - A baby born with FASDs may be seriously disabled and require a lifetime of special care.



## Developmental Disabilities

Child care professionals who have a basic understanding of some common developmental disabilities may be better prepared to support these children and the other children in the program.

A \_\_\_\_\_ - disability is a chronic condition that is diagnosed in childhood and substantially limits major life activities in adulthood.

Appropriate support in the first three years of life is called \_\_\_\_\_ intervention; and the sooner intervention services begin, the better.

A child care professional's role in the intervention process is to recognize the signs of the most prevalent developmental disabilities; ensure families are aware of intervention services; and provide individualized, compassionate, and developmentally appropriate care at the child care program.

It is important to remember that child care professionals should never try to diagnose children or attempt to treat or remedy a developmental disability on their own.

Caregivers should, however, learn to recognize the characteristics of some of the most prevalent disabilities so they can make referrals appropriately in accordance with their child care program's policies and procedures.

There are two developmental disabilities that you should be sure to remain knowledgeable about:

- Autism spectrum disorder – a group of brain-based neurological disorders characterized by social impairments and communication difficulties; as well as restricted and repetitive patterns of behavior, such as rocking back and forth, twirling or spinning, and flapping or waving of arms. The characteristics of Autism can present in a variety of ways, combinations, and degrees in individual children.
- Down syndrome – a genetic disorder that results in a number of physical characteristics and intellectual impairments. Children with Down syndrome may have flattened facial features and a small mouth and ears. They might have broad hands, a single crease in their palms, and short fingers. A child born with Down syndrome always has intellectual impairments, with varying degrees of severity from mild to profound.



## Inclusive Child Care Programs

When child care programs fully support children with developmental disabilities, they are said to be inclusive.

The Americans with Disabilities Act, or \_\_\_\_\_, is a federal law requires child care programs to comply with specific accessibility guidelines to support children with developmental disabilities.

Another federal law that you should be familiar with is the Individuals with Disabilities Education Act, also known as \_\_\_\_\_. It ensures that children with disabilities ages 3 to 21 receive a free and appropriate public education and that early intervention services are provided to eligible infants and toddlers.

Additionally, child care professionals:

- use Developmentally Appropriate Practice (DAP)
- establish a routine and schedule
- foster friendships
- nurture language development
- facilitate imaginative play
- assist families in meeting their children's needs



## Identifying Children with Special Needs

When working with children, we need to remember that each child develops at a different rate of speed. Sometimes, what we see in a certain child is not slower development, but rather a signal that the child is having a problem.

For more information about working with children with special needs, take the Department of Children and Families' courses *Special Needs Appropriate Practices* and *Supporting Children with Developmental Disabilities*.



**Key Point:** Children with disabilities are legally entitled to equal access to community-based child care settings.

### Additional Resource

The Centers for Disease Control and Prevention has a "Learn the Signs. Act Early" section of the website dedicated to understanding milestones so professionals can learn the signs and act early.

### Possible Signs of Concern

#### Possible Physical Disabilities

- Difficulty with large muscle motor activities such as climbing stairs, crawling, riding a tricycle
- Frequently walking or bumping into things
- Shows a lack of energy
- Difficulty with activities such as building a tower of blocks

#### Possible Visual Problems

- Difficulty in seeing distant things clearly
- Holds toys or books very close to eyes
- Rubs eyes frequently
- Blinking eyes often when doing work

#### Possible Hearing Problems

- Poor speech, omits sounds, loud voice
- Does not understand directions
- Does not answer when called
- Trouble paying attention in large group activities
- Often gives the wrong answers to the questions
- Avoids playing with other children
- Becomes tired early in the day

#### Possible Speech or Language Problems

- No speech by age two
- Does not use two or three word sentences by age three
- Difficulty understanding after age three
- Stutters after age five
- Has poor voice quality
- Problems understanding what is said

#### Possible Learning Problems

- Unable to follow directions because they cannot remember what was said
- Frequently bumping into things, knocking things over
- Unable to see differences in size, shape and color
- Cannot remember what is seen or heard
- Cannot tell the difference between sounds and textures

#### Possible Attention Problems

- Acts very quickly without thinking about consequences
- Very short attention span
- Cannot complete task
- Switches from one task to another
- Easily distracted by another situation
- Unable to return to original task
- Excessive movement
- Constant motion even when classroom is quiet

*Adapted from Miami-Dade College (South Campus)  
Child Care Training Program*



### **Activity: Addressing Special Needs**

Think about how you might address the special needs of each of the following children with special needs. Record your thoughts in your participant's guide.

1. A child who is physically challenged/A child who wears leg braces

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2. A child who is socially challenged/A child who has autism

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3. A child who is shy or emotionally challenged

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4. A child who is gifted

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5. A child who is mentally challenged

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## Accommodating Children with Special Needs

Children with special needs can be accommodated in a child care environment with the help of assistive technologies and additional training of the staff.

What are some questions child care professionals need to ask themselves, or the family regarding the child with special needs?

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**Key Point:** Overcoming or reducing the effect of developmental obstacles requires teamwork between the child, parents, and the child care professional.



## Prevention, Redirection, and Positive Reinforcement

The best way to guide the behavior of children with developmental disabilities is to use positive behavior supports while providing developmentally appropriate individualized care.

- \_\_\_\_\_ is a strategy that stops challenging behaviors before they begin, and it is the primary method child care professionals use to encourage children to discard these behaviors.
- \_\_\_\_\_ is a strategy that is used to guide children's behavior by recognizing challenging behavior at its earliest stages and taking steps to stop it from escalating.
- \_\_\_\_\_ is a strategy in which desired behaviors are rewarded so that the child is encouraged to repeat them.



### **Activity: Meet the Children**

Review each of the following scenarios and think about their age and the factors that may be influencing the child's behaviors, such as environment, temperament, health, or special needs.

**Scenario 1** - Kierra is a toddler who has learned how to scribble with a crayon from her big sister. She can stand on her tiptoes. When she starts to sing the "ABC" song, she usually winds up with lines from "Twinkle-twinkle Little Star." She has become pretty good at following simple instructions. She gets frustrated when she has trouble doing something. Only about half of what she says is understandable by strangers and many of her words are a mixture of Spanish and English.

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**Scenario 2** - Julie, a preschool child, does not sleep at nap time anymore. She is very friendly and adores her older sister. She likes playing with dolls and changing their clothes. She has started to admonish the younger children, reminding them of "the rules." She does not yet reliably count to ten, getting scrambled with random "teens."

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**Scenario 3** - Teddy, a toddler, can stand and can walk while holding onto an adult's fingers. He recognizes and responds to his own name about half of the time, but cannot hear well. He can babble, but has not yet said his first really intelligible word. He gets very focused when he plays with blocks and cups. He is still drinking from a bottle, and does not yet have the hang of a sippy-cup.

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**Scenario 4** - Tina, a toddler, will look at you when you talk to her and she can ask for something by pointing and saying "please." She has a vocabulary of about twelve words that are clearly understandable. She gets anxious for a little while when one of her parents drops her off in the morning. She gets frequent stomachaches. She can pull herself up on furniture and can take a step or two before sitting down. She can pull off her hat, but not her socks.

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**Scenario 5** - Three-year-old Vaughn has a large vocabulary and talks almost non-stop. He really enjoys being your "helper." He asks many questions. He likes to play tag, but changes the rules on the spot to his own advantage. He can write his name, but uses a lot of space. He can remove his own clothes and put on his pajamas. He can brush his teeth without help. If offered a piece of candy, he will request that his younger brother receive a piece too.

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**Scenario 6** - Jose', a preschool child, usually prefers to play with the other boys, rather than the girls. He knows his left from his right, and can tie his own shoelaces. He tattles on other kids. He can balance on one foot, and can ride a bicycle without training wheels. He likes knock-knock jokes, and knows days of the week and months of the year.

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## Importance of Routines

A routine is a predictable sequence of steps or activities that are performed to complete a task. A routine is based on the children's developmental level and skills, and helps them feel secure and comfortable by letting them know what to expect.

Establishing a predictable schedule and a familiar set of routines helps children feel a sense of:

- \_\_\_\_\_ and self-esteem ("My needs will be met." "I am worthy of this person's attention.")
- \_\_\_\_\_ and space ("Toys go here." "This is when we have a snack.")
- \_\_\_\_\_ and competence ("I can do this by myself.")



**Key Point:** A routine is a predictable sequence of steps or activities that are performed to complete a task.

## Developmental Level and Skills

Caregiving routines should be based on the child's developmental level and skills. Here are some things to keep in mind about routines:

- Routines for older infants and toddlers should take into account the child's efforts to become independent.
- Toddlers are quickly learning to do things for themselves, such as feed themselves, wash their hands, and pull up their pants.
- Try to let them do as many things as they can by themselves.
- Toddlers can be quite cooperative one minute, then running from you the next. As a result, routines should be carried out in a way that is open and flexible, yet there is a predictable sequence to the routine.
- In any routine, making a smooth transition from one activity to the next can help minimize the stress.
- Let children know what will be happening next with statements such as, "In a few minutes, we are going to stop and I am going to change your diaper." This helps children feel safe and secure.
- Routines are built on daily activities like feeding, toileting, and dressing.



**Key Point:** A routine should be based on children's developmental level and skills and help them feel secure and comfortable by letting them know what to expect.



## Feeding Routines

Whether at the beginning, when children are being bottle- or breast-fed, or later when children have developed the ability to feed themselves, feeding children becomes a major part of a caregiver's day. By understanding the feeding activity of children at various ages, you can develop feeding routines that help children know what to expect at mealtime and snack time.

### **Infants:**

- Young infants should always be held for feeding.
- Most infants will be bottle fed by caregivers, regardless of whether the bottle contains breast milk or formula.
- New foods should be introduced gradually, one at a time.

### **Young Toddlers:**

- Most toddlers can communicate when they are hungry and when they have had enough.
- They may be able to sit for feedings.
- Young toddlers may begin to drink from cups, as well as bottles; and they like to practice using the spoon as you feed them.

### **Older Toddlers:**

- Older toddlers are ready for a wider range of foods.
- They continue to eat cereal, fruits, and vegetables, adding other foods to create more of a variety.
- Through feeding themselves finger food and using bowls and spoons, they are developing greater coordination and independence.

### **Preschoolers:**

- Children's appetites diminish as they grow more slowly.
- They have become more independent and often assert their wills by rejecting foods offered to them.



## Toileting Routines

When beginning toilet training, it is important to consider readiness signals, and also to remember that a child should not be experiencing a stressful situation when toilet training is started. Stressful situations may include weaning from the breast or bottle, the birth of a new baby in the family, or changes in child care arrangements. Four to six weeks after the stressful situation should pass before beginning toilet training.

### Older Toddlers:

- Most children have the muscle control to regulate themselves between eighteen months and three years of age.
- Children with disabilities may not have this ability until a later age.
- Certain medical problems may delay or prohibit a child from developing the muscle control needed for self-regulation.

More important than chronological age is the level of readiness. There are a number of readiness signals that caregivers should look for that will make training easier and faster:

- Excitement over learning to walk and run
- Able to sit down and play quietly for about five minutes
- Able to help dress and undress self (as long as the process does not involve complicated unbuttoning or untying)
- Shows imitative behavior
- Wants to put toys and other possessions where they belong
- Able to understand and follow simple directions
- Takes pride in accomplishments
- Has bowel movements at regular times every day
- Bowel movements are well formed
- Able to remain dry for about two hours at a time
- Able to urinate a good amount at one time
- Aware of the process of elimination
- Has a name for urine and bowel movement



## Dressing Routines

Dressing and undressing are good opportunities for one-on-one interaction that help make the caregiver-child relationship a special one.

### **Young Infants:**

Dressing and undressing a young infant can be rather frustrating. Their hands and elbows stick out at strange angles and catch in sleeves. They become more cooperative partners and dressing/undressing becomes much easier.

### **Young Toddlers:**

- Dressing and undressing the young toddler can be quite tricky.
- They often do not want to stand still and may even try to get away.
- They are likely to be more cooperative with undressing than with dressing.
- Young toddlers can usually push arms through armholes and legs through pants.
- They can untie shoes and pull off socks.
- Tying, buttoning, and snapping comes much later. You can help the process by providing dolls with easy-to-handle clothes; and button boards or frames with a variety of fasteners, such as buttons, snaps, or zippers.

### **Older Toddlers:**

- Older toddlers have improved dressing skills and some children may be able to dress themselves, if the clothes are simple and large enough.
- Most children, however, still need help. Again, remember that independence and autonomy are an issue at this age, and children should be allowed to make choices if possible. For example, you could ask, “Do you want to wear the red shirt or the blue one?”

### **Preschoolers:**

- Can usually dress and undress without assistance.
- Are able to zip a coat and button a shirt.
- Can usually tie shoes with some coaching.
- Are able to brush teeth and comb hair without assistance.



**Key Point:** Knowledge of developmental stages and influences on a child is crucial in making your decisions as a child care professional.



## Module 3 Summary

Here is a summary of key points for **Module 3: Influences Affecting Child Growth and Development**.

Being knowledgeable about typical child development, as well as the factors that affect development, allows you to tailor the activities and expectations for the children in your care.

Using physical activities, such as Brain Gym, helps stimulate the brain to ensure it is alert and receptive to absorbing new information and concepts.

Heredity is the blend of physical and temperamental characteristics inherited by a child from the birth parents, which affect their personality and may have positive or negative influences on a child.

Everything you do in the child care setting has an effect on the children's development and learning.

Maintaining a healthy body through proper nutrition and exercise is essential for children's most favorable growth and development.

Health status is one of the largest contributing factors that affect a child's ability to grow and develop at a typical rate.

Childhood obesity is a growing epidemic that leads to a variety of serious health complications.

Experiencing positive social interactions with both adults and peers establishes the foundation for feelings of acceptance, belonging, and self-esteem.

The typical skills and behaviors for children of a certain age range may not be possible for some children who are developmentally delayed.

Children with disabilities are legally entitled to equal access to community-based child care settings.

Overcoming or reducing the effect of developmental obstacles requires teamwork between the child, parents, and the child care professional.

A routine is a predictable sequence of steps or activities that are performed to complete a task.

A routine should be based on children's developmental level and skills and help them feel secure and comfortable by letting them know what to expect.

Knowledge of developmental stages and influences on a child is crucial in making your decisions as a child care professional.



## Module 3 Conclusion

You have completed Module 3: **Influences Affecting Child Growth and Development**.

You have achieved this module's learning objectives if you can:

- Describe characteristics that influence child growth and development
- Explain how child care professionals can support children with developmental disabilities

# **Child Growth and Development**

## **Module 4: Developmental Domains**

### **Overview**

This module will introduce the eight developmental domains as they relate to children from birth through school age.

### **Module Goal**

Participants will understand the typical growth, behavior, or skill expectancies in each developmental domain.

### **Learning Objective**

After successfully completing this module, you will be able to:

- Summarize the developmental domains
- Categorize age ranges and the typical growth, behavior, or skill expectancies in the developmental domains





## Overview

This module reviews the developmental domains or areas of development used to measure children's progression of growth, behavior, skills, and abilities that are typical within certain age ranges. The Florida Department of Education Office of Early Learning along with an extensive panel of state and national experts developed eight domains, which are further broken down into components, sub-components, standards, and benchmarks of development.

The domains include:

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The Office of Early Learning's Florida Early Learning and Developmental Standards website is a resource for early childhood education professionals and families. It includes the early learning standards, videos, activity ideas, and resource documents related to the eight domains.

The website includes several important resources, including but not limited to:

- **An Educator's Guide to Understanding The Florida Early Learning and Developmental Standards: Birth to Kindergarten:** a comprehensive document for families, caregivers, and educators, which details the developmental standards for children from birth to Kindergarten.
- **Florida Early Learning and Developmental Standards Birth to Kindergarten (2017):** contains only the development charts for each domain
- **2017 Early Learning Standards Crosswalk with Kindergarten Standards:** crosswalks the early learning standards with kindergarten standards
- **Best Practices in Inclusive Early Childhood Education:** a self-assessment tool developed for early learning practitioners (available in English and Spanish)



## Children's Development by Age

Children experience the most rapid growth and development from birth to age five. Development progresses at irregular intervals, with progress periodically starting and stopping. It is normal for children to have some variation in the patterns and timing of their growth and development, rather than a smooth progression. Development is uneven, as children do not progress in all skills at the same time; a child grows and learns as a whole, not in pieces. Skills such as sitting up, grasping, or walking are examples of increasing maturation. These skills—for example—involve muscle strength and coordination that, in turn, are influenced by things such as nutrition and opportunities to practice.

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This module will focus on development in the following age ranges:

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## Observing Different Skill Levels

As you watch Audrey, Bianca, and Luke put puzzles together, you notice them using the skills you have taught them, such as looking carefully at the picture, pointing out curved and straight edges of the pieces, tracing shapes and edges with their fingers, and looking for corners. You also notice a few additional things:

- Audrey is working on a ten-piece puzzle and is turning puzzle pieces several ways to find the right fit.
- Bianca is attempting a twenty-five-piece puzzle with great success.
- Luke can put a wooden puzzle together when the shape fits in the corresponding cutout, especially if each piece has little handles.
- All three children are busy and happy as they complete their puzzles.

It is obvious that each child is functioning at a different level in their skills at solving these puzzles.

Are any of the children developmentally delayed? Could any of the children be advanced? Are they all on target with the typical motor skills of three year olds?

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As a child care professional, you have the responsibility of choosing learning strategies that are both age appropriate and challenging. You must have an understanding of

- Typical behaviors and abilities of children at certain ages
  - What children should know and be able to do from birth through school age
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**Key Point:** A child care professional who is knowledgeable about typical behaviors and abilities of children can support learning new skills and detect problems.



## Understanding the Developmental Domain Charts

The Developmental Domain charts are accessible from the Office of Early Learning's Florida Early Learning and Developmental Standards website. Child care professionals should become familiar with these charts and use them as guides for developmental progression.

Each chart contains the same or similar elements as the example shown, which is from a section of the Physical Development Domain chart. The age ranges are listed across the top, followed by the domain's first component, which in this example is "Health and Wellbeing" and its sub-component, "Active Physical Play." The standard is "Engages in physical activities with increasing balance, coordination, endurance and intensity." Some developmental areas will contain benchmarks and others will not. For a child in the 8-18 months age range, a sign of development is that the child is using movement and their senses to explore and learn.

I. PHYSICAL DEVELOPMENT DOMAIN *					
Birth - 8 months	8 - 18 Months	18-24 months	2 - 3 years (24 - 36 months)	3 - 4 years (36 - 48 months)	4 years- Kindergarten (48 months - Kindergarten)
A. HEALTH AND WELLBEING					
a. Active Physical Play					
1 Engages in physical activities with increasing balance, coordination, endurance and intensity					
Benchmark a: Demonstrates beginning signs of balance, control and coordination	Benchmark a: Uses movement and senses to explore and learn	Benchmark a: Engages in brief instances of physical play (e.g., pushes wheeled toy for short distance, puts toys in wagon and pulls wagon around the room)	Benchmark a: Engages in active physical play for short periods of time	Benchmark a: Engages in active games or outdoor play and other forms of physical activity for sustained periods of time (e.g., dancing in circle time)	Benchmark a: Seeks to engage in physical activities or active play routinely with increased intensity and duration

Remember, it is the **sequence** of growth and development, not the age that is the important factor in evaluating a child's progress. The developmental domain charts for all eight domains are set up in the exact same format.

- You are expected, however, to study these charts carefully because they contain information that is critical to you, as a child care professional.
- You must know what to expect from all of the children in your care, regardless of if their development seems typical, or indicates developmental delays or special needs.
- This information is at the very core of your decisions about setting up your child care environment, designing the curriculum and learning strategies, and assisting parents in evaluating their children's progress.

For more information, take the Florida Department of Education, Office of Early Learning's courses *Implementing the Florida Standards in Early Learning Classrooms: Birth to Kindergarten*, *Implementing the Florida Standards in Preschool Classrooms: 3 Years Old to Kindergarten*, and *Implementing the Florida Standards in the Infant and Toddler Classrooms: Birth through 2 Years Old*.

**Key Point:** Knowing the typical growth, behavior, and skill expectancies of children across their age range is paramount for caregivers when designing an appropriate learning environment, creating curriculum and learning strategies, and assisting parents in evaluating children's progress.



## Physical Development



Physical Development is a child's typical growth patterns, motor development, changes in weight and height, general health, visual perception, hearing, and any other area related to children's physical wellness.

Children demonstrate physical development in the following two components:

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It is important to remember that children grow and develop at individual rates. You may find that some children are able to do more with their bodies at an earlier age than others. You may also notice a great variance within an individual child between areas of physical development.

**Physical Development By Age**

<b>Birth – 8 Months</b>	<b>8 – 18 Months</b>	<b>18 – 24 Months</b>
<b>2 – 3 Years</b>	<b>3 – 4 Years</b>	<b>4 Years – Kindergarten</b>
<b>5 – 12 Years</b>	Child care professionals observe typical growth, behavior, and skill expectancies in children across each of the developmental domains according to their age ranges. Refer to An Educator's Guide to Understanding <i>The Florida Early Learning and Developmental Standards: Birth to Kindergarten</i> for more detailed information.	



**Key Point:** The Physical Development Domain refers to a child's physical health, growth, and motor development.



## Fine and Gross Motor Development

The development of motor skills, both gross and fine, are important to the overall physical development of a child.

\_\_\_\_\_ motor skills involve the development of large muscles, such as those found in the arms and legs. Gross motor skills include running, throwing, jumping, and climbing.

\_\_\_\_\_ motor skills involve the development of small muscles, such as those found in the fingers, lips, and toes. Fine motor skills include grasping, writing, and eating.

Growth occurs in spurts. A child may suddenly be able to accomplish a task that was unachievable a week ago.

- Do not leave a baby alone during diapering. They may choose that moment to roll over for the first time.
  - A child's size and increasing maturation may determine how quickly a child can accomplish physical tasks.
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**Key Point:** Motor development is an important part of the physical development.



## Supporting Physical Development

To ensure the children in your care are healthy and well nourished, it is important to:

- Observe their eating patterns and bodily functions.
- Serve healthy and nutritious meals and snacks.
- Provide many opportunities to be physically active.
- Encourage good hygiene practices.
- Demonstrate and practice safety rules.

Communication with parents is vital in the areas of health and safety.

- Records on regular medical care and immunizations should be up to date.
- Be alert to symptoms of illnesses.
- Have conversations with families about home and child care routines.
- Inform parents of each child's daily eating patterns.

There are actions you can take on a daily basis to promote good health.

- Practice hand washing and tooth brushing on a regular basis.
- Encourage children to exercise through activities such as jogging, walking, jumping, running, and dancing.
- Create and enforce safety rules for the indoor and outdoor learning environment.
- Promote activities that encourage children's sense of independence.

**Key Point:** Since physical development is particularly important during the first five years of a child's life, children should be offered an array of planned physical activities that foster healthy growth, as well as develop fine and gross motor skills.



## Approaches to Learning



Approaches to Learning refers to a child's eagerness to learn. It includes curiosity, persistence, problem solving, and the ability to create and complete long-term projects. During the first years of a child's life, we can usually discover these characteristics in a child by observation.

Children demonstrate approaches to learning in the following four components:

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As a child care professional, you can foster the learning habits of curiosity, persistence, problem solving, and creativity in each child. The more you practice these learning habits and let children observe your behavior, the more learning children will absorb and copy.

### Approaches to Learning By Age

Birth – 8 Months	8 – 18 Months	18 – 24 Months
2 – 3 Years	3 – 4 Years	4 Years – Kindergarten
5 – 12 Years	Child care professionals observe typical growth, behavior, and skill expectancies in children across each of the developmental domains according to their age ranges. Refer to An Educator's Guide to Understanding <i>The Florida Early Learning and Developmental Standards: Birth to Kindergarten</i> for more detailed information.	



**Key Point:** Approaches to learning is a unique area of development that focuses on children's motivations and strategies toward learning experiences.



## Supporting Approaches to Learning

"Research shows that if children start school with a strong set of attitudes and skills that help them "learn how to learn," they will be better able to take advantage of educational opportunities. While some learning skills come naturally to children, others can be developed through a supportive environment."

Arthur. "Approaches to Learning." PBS. Accessed January 21, 2016. <http://www.pbs.org/parents/childdevelopmenttracker/five/approachestolearning.html>.

Some useful information about the Approaches to Learning Domain:

- It requires child care professionals to be alert to **opportunities** to encourage and praise children who are demonstrating persistence, intellectual curiosity, and creativity.
- The habits and attitudes in this domain are not learned only through formal instructions, but are **encouraged** in children by being around people who exhibit them.
- As the child care professional, you need to acknowledge a child when you see them completing a task or being **persistent** in their dedication to solving a problem.
- You can help support eagerness, curiosity, persistence, problem solving, and creativity with effective **modeling** by adults; also by giving praise to children when they exhibit use of these habits and attitudes.

It is important to:

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**Key Point:** Approaches to Learning is important for developing children's eagerness, curiosity, and persistence to learn.

## Developing Questions That Help Children Think

Carefully crafted questions can encourage creative thinking. Because language and thought are closely intertwined, more elaborate, and fully articulate answers help children practice higher-level thinking skills. Many of the examples below require children to wrestle with uncertainties, make connections, or create their own definitions.

1. Applying/Matching	<ul style="list-style-type: none"><li>• How could you use...?</li><li>• What job uses this ...?</li><li>• When would you need this ...?</li></ul>
2. Comparing/Contrasting	<ul style="list-style-type: none"><li>• What is similar to ...?</li><li>• How is this like ...?</li><li>• How is this different from ...?</li></ul>
3. Connecting Ideas	<ul style="list-style-type: none"><li>• What things do you think about?</li><li>• What do you already know about ...?</li></ul>
4. Evaluating/Judging	<ul style="list-style-type: none"><li>• What do you like/dislike about ...?</li><li>• What is your favorite ...? Why?</li></ul>
5. Alike/Different	<ul style="list-style-type: none"><li>• How is ... like ...?</li><li>• What else looks like ...?</li><li>• What part of ... is like you?</li></ul>
6. Symbolizing	<ul style="list-style-type: none"><li>• Can you draw a picture of this?</li><li>• What song would match this?</li><li>• Could you write a sentence/story/poem about this?</li></ul>



## Social and Emotional Development



Social and Emotional Development is a broad area that focuses on how children feel about themselves and their relationships with others. It refers to children's individual behaviors and responses to play and work activities, attachments to parents and caregivers, relationships with siblings and friends, and prosocial behavior. Young children are developing in all of the domains simultaneously. Early brain development research states that social and emotional development and cognitive development are interdependent. This means that children need to have positive, healthy social interactions in order to learn and develop. A child is unable to learn when their emotional and social well-being are threatened.

Children demonstrate social and emotional development in four components:

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**Social and Emotional Development By Age**

Birth – 8 Months	8 – 18 Months	18 – 24 Months
2 – 3 Years	3 – 4 Years	4 Years – Kindergarten
5 – 12 Years	Child care professionals observe typical growth, behavior, and skill expectancies in children across each of the developmental domains according to their age ranges. Refer to An Educator's Guide to Understanding <i>The Florida Early Learning and Developmental Standards: Birth to Kindergarten</i> for more detailed information.	



**Key Point:** Social and Emotional Development refers to how children feel about themselves and their relationships with others.

## Forming Friendships

Children are not born knowing how to form friendships, nor do they come into this world understanding the rules their society has established. Remember that much of what children learn about making friends and getting along with others is learned by watching others. Even young children notice basic qualities, such as kindness, friendliness, and cooperation. Modeling appropriate pro-social behaviors is a very important tool for teaching young children how to get along with others.

- When difficulties do arise between children, parents and caregivers should resist the temptation to get involved too quickly, but be ready to intervene if the situation escalates.
- Learning to handle disputes and resolve conflicts are important skills for children to learn.
- If a child seems unable to solve the problem, you may then want to help the child by making gentle suggestions such as, "Why don't you try... If that does not work, come back and we will think of something else." This technique helps children work out their differences and learn to settle disagreements on their own.

Learning to get along with others and develop friendships are good indicators of a child's healthy development. Children who have difficulty making friends early on are often at risk for later difficulties. A child who is isolated from the playgroup or rejected by classmates may need some support and assistance from an adult.



**Key Point:** Forming friendships with peers is an important part of child growth and development.

## Identifying Facial Expressions

Expressions vary from person to person. Infants and toddlers use expressions as a means to interpret and understand the adults and children around them. Expressions can also confuse toddlers. It is important to teach children about emotions to ensure they understand them correctly.

One way to use an emotion face chart would be to ask children to volunteer to go to the chart and choose which face shows a sad face, angry face, happy face, etc., as you call out an emotion from the choices. There are many emotion charts available online or child care professionals can make one using the children in the classroom demonstrating facial expressions. The sample is representative of what a chart may look like. Younger children would have fewer emotions on a chart because of their developmental level. As children begin to understand emotions, they will be able to understand more emotions.



**Key Point:** Facial expressions are an important way to communicate and interpret emotions.



## Supporting Social and Emotional Development

To strengthen feelings of attachment and help the infant build a close, trusting relationship with his/her caregiver, it is important to:

- Recognize the need for a primary caregiver for each child.
- Move in quickly to comfort the infant when he/she is distressed. You can rock, sing, or walk with him/her to soothe.
- Be attentive to the infant's signals and cues and respond quickly to his/her need for food and comfort.

Separation can be a very emotional time for both children and parents. Here are some suggestions helping to smooth that separation:

- Acknowledge to parents how hard it must be to leave their baby.
  - Invite parents to call during the day to check in and let them know they are welcome to drop in unannounced at any time.
  - Allow the child to bring a stuffed animal or blanket from home.
  - Help the child close the door or say goodbye from the window.
  - Let the infant look at your face and see your expressions. Try different expressions, such as blinking your eyes, using big mouth movements, or sticking out your tongue.
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**Key Point:** Social and emotional development is critical to children's overall health and their ability to thrive, develop, and learn.



## Language and Literacy

Language and Literacy refers to the child's ability to communicate with others. It involves children's abilities to see, hear, speak, read, write, and construct an understanding of things around them. From the very first day of an infant's life, he/she is trying to communicate with the world around him/her. He/she will strive to make connections with the people in his/her life that satisfy his/her needs for food, comfort, and companionship.

Children demonstrate language and literacy in the following seven components:

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**Language and Literacy By Age**

Birth – 8 Months	8 – 18 Months	18 – 24 Months
2 – 3 Years	3 – 4 Years	4 Years – Kindergarten
5 – 12 Years	Child care professionals observe typical growth, behavior, and skill expectancies in children across each of the developmental domains according to their age ranges. Refer to An Educator's Guide to Understanding <i>The Florida Early Learning and Developmental Standards: Birth to Kindergarten</i> for more detailed information.	



**Key Point:** Language and literacy is an area of development that refers to children's ability to use language to communicate, read, and write.

## **Vision and Hearing in Infancy**

- Young infants are able to see at a distance of approximately eight to fifteen inches. Objects held at this distance are most clear. Since this is the distance at which you typically hold or feed a young infant, your face is one of the objects that an infant will see best.
- Young babies like looking at the human face and find it very interesting.
- Infants have some difficulty focusing their eyes on things beyond fifteen inches. They are unable to pick up the details of objects.
- Babies are interested in objects that move and that have high contrast in areas of light and dark.
- Babies are born with the ability to hear. This ability begins to develop in the womb.
- Mothers frequently report that they notice the unborn baby moving right after a loud noise.
- Long before a baby is born, he/she is hearing sounds such as his/her mother's voice and his/her mother's heartbeat.
- Newborns are especially fascinated by the human voice. They come into the world ready to listen to the sounds of human language.
- Before babies utter their first word, they are preparing for language in many ways. They listen attentively to human speech and they begin to make speech-like sounds.

## **Early Communication Development**

When you are sensitive to this early communication and are able to respond with interest to the infant's attempts at communication, it will help them become competent communicators.

It should be noted that "hearing" matures to "listening." Infants hear sound in their environment. As they grow, they begin to listen. They begin to attach meaning to words and other sounds.

The same process occurs with seeing. Infants see objects in their environment. As they mature, they construct an understanding of the things around them that they see, so their vision becomes a window



**Key Point:** Infants and toddlers attach meaning to words and other sounds, and to what they see in the environment.

## Developing Literacy Skills

Reading is one of the most important skills that contributes to education. Literacy is a key skill involved in the learning process and the earlier this skill is developed, the better the chances a child will have a successful academic career.

It is never too early to start reading to children. It is critical that child care professionals create a learning environment that is designed to nurture the emergent literacy of infants, toddlers, and preschoolers. Studies show that the more children read, the better readers and writers they become. You can encourage the growth of language and cognitive abilities by reading. Infants and toddlers need to be exposed to learning activities that teach them skills in preparation for reading. Preschoolers need to be provided with strong support of their emerging reading ability. When children become good readers in the early grades, they are more likely to become better learners throughout their school years and beyond. It is important to remember that some children may come from a literacy-poor home environment. Their experiences with your child care environment may be the only contact they have with books and reading. Daily reading is essential!

Older toddlers show growing interest in print and books. They demonstrate some book-reading skills such as holding a book upright and turning pages right to left. These book-reading skills are important and include reading a book from front to back and from the top of the page to the bottom. Three-year-old children are growing into their own as they begin to engage in dramatic play.

They are also demonstrating phonological awareness by saying the sounds of letters. Phonological awareness is a term used to describe a person's knowledge of the sound structure of words. Phonological awareness activities should be connected to words children are familiar with, especially when these activities are also connected to daily reading of good children's literature.

While children may understand some of the concepts of print—such as reading from the top down and from left to right—at five years old, they have gained additional knowledge about the printed page. They have learned that letters are used to make words, letters are used to write words, and words are the things we read. They see that letters stand for the sounds we say and letters can be used more than once in a word. They are beginning to see that words are separated by spaces; and there are periods, question marks, and exclamation marks at the ends of sentences. If they have not already mastered the alphabet, four-year-olds should be taught the alphabet song and be able to identify uppercase letters. Studies have shown that a child's knowledge of the alphabet by the time they reach kindergarten is one of the single best predictors of eventual reading success.



**Key Point:** Daily reading is essential to literacy – the more children read, the better readers and writers they become.

## **Reading to Children**

- \_\_\_\_\_ a joy of reading and writing for children.
- Create a high-quality, diverse library of books for story time and individual reading.
- Encourage parents to read aloud to their children and have plenty of books and reading materials available in the home.
- Create a print-rich environment with plenty of art, books, vocabulary strips, maps, posters, and alphabet signs.
- Use a computer to find stories, learning activities, and games that can become a part of the daily schedule.

When planning for story time:

- Preview the material. Ensure that all materials are fun, engaging, and age appropriate.
- Practice reading with plenty of expression. This helps make story time a more engaging experience for children.
- Choose books with pictures that will interest children and fuel their imaginations.
- Stories and poems that rhyme are fun and appeal to children.



**Key Point:** Reading to children should be fun and done multiple times each day.

## **Writing Skills**

There should be time designated each day to practice writing. Daily practice is essential to help children become more proficient in writing letters, words, and sentences.

Reading and writing skills develop in children at the same time.



**Key Point:** Daily practice in the skills of writing is essential for children to develop their writing ability.



## Supporting Language and Literacy

The implications that literacy has on language and communication extend beyond reading and writing, and can be seen in children's spoken communications. Listen to and talk with each child every day. Make it a habit to speak individually to each child throughout the day; this will make it easier to find a moment for each child, no matter how busy your day may be. Speaking individually with each child will help you gain an understanding of what they are learning, and how they are progressing with their literacy skills. Be sure to set aside some time to devote to children who need it, such as quiet, shy children; or children who speak English as a second language.

You can also incorporate games and songs that help broaden and build the depths of children's vocabularies. Research play opportunities that encourage communication between children, and periodically introduce them to new words to ensure that they are building a healthy and rich vocabulary.



**Key Point:** Language and Literacy is essential for children to learn, communicate, read, and write, as well as to play and work with others.



## Mathematical Thinking



Mathematical Thinking refers to number knowledge, patterns, size, shape awareness, and the relationship between objects and space. Children are naturally interested in numbers and mathematical concepts. They learn through observation and interaction with the environment.

Children demonstrate mathematical thinking skills in the following six components:

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**Mathematical Thinking By Age**

Birth – 8 Months	8 – 18 Months	18 – 24 Months
2 – 3 Years	3 – 4 Years	4 Years – Kindergarten
5 – 12 Years	Child care professionals observe typical growth, behavior, and skill expectancies in children across each of the developmental domains according to their age ranges. Refer to An Educator's Guide to Understanding <i>The Florida Early Learning and Developmental Standards: Birth to Kindergarten</i> for more detailed information.	



**Key Point:** Mathematical Thinking is an area of development that focuses on children's understanding of numbers and mathematical concepts.



## Supporting Mathematical Thinking

Children begin developing mathematical understanding from the first few months of their lives. Math concepts can be integrated into most subjects, such as music, social studies, literacy, art, etc. Child care professionals support mathematical thinking by creating opportunities for children to count, sort, and explore objects and shapes.

Examples of supporting mathematical thinking include:

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**Key Point:** Mathematical Thinking is a significant part of children's development, as mathematics is everywhere and can be used in all areas of learning.



## Scientific Inquiry



Scientific Inquiry is children using their natural investigative curiosities to explore their world. It refers to children exploring and discovering in order to learn about the environment through senses and reflexes.

Children demonstrate scientific inquiry in the following six components:

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### Mathematical Thinking By Age

Birth – 8 Months	8 – 18 Months	18 – 24 Months
2 – 3 Years	3 – 4 Years	4 Years – Kindergarten
5 – 12 Years	Child care professionals observe typical growth, behavior, and skill expectancies in children across each of the developmental domains according to their age ranges. Refer to An Educator's Guide to Understanding <i>The Florida Early Learning and Developmental Standards: Birth to Kindergarten</i> for more detailed information.	



**Key Point:** Scientific Inquiry is an area of development that refers to children's exploration and discovery about the world including nature, objects, earth, space, engineering, and technology.



## Supporting Scientific Inquiry

Children are naturally curious and desire to explore and investigate their world. Child care professionals can foster scientific inquiry by creating opportunities for children to explore, investigate, observe, and record changes in their environment such as the weather.

Examples of supporting scientific inquiry include:

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**Key Point:** Scientific Inquiry is necessary for children to satisfy their natural curiosities and to learn about their environment through exploration, investigation, and observation.



## Social Studies



Social Studies refers to children's basic social understanding beginning with themselves and family members, and then expanding to early education. Social studies assists children with social-emotional growth and integrity.

Children demonstrate social studies in the following eight components:

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### Social Studies By Age

Birth – 8 Months	8 – 18 Months	18 – 24 Months
2 – 3 Years	3 – 4 Years	4 Years – Kindergarten
5 – 12 Years	Child care professionals observe typical growth, behavior, and skill expectancies in children across each of the developmental domains according to their age ranges. Refer to An Educator's Guide to Understanding <i>The Florida Early Learning and Developmental Standards: Birth to Kindergarten</i> for more detailed information.	



**Key Point:** Social Studies is an area of development that begins with children's basic understanding about themselves and their family members before expanding to their peers and other people in their environment.



## Supporting Social Studies

Social interactions are important for developing children's self awareness and relationships with family members, caregivers, and peers. Child care professionals support social studies by providing a nurturing and respectful environment that promotes social learning.

Examples of supporting social studies include:

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**Key Point:** Social Studies is important for developing children's social and emotional growth in nurturing and respectful environments.



## Creative Expression Through the Arts



Creative Expression Through the Arts helps children to express their ideas and feelings, and to learn to solve problems using words, tools, and media. Children learn to appreciate other people's contributions, which gives them a better understanding of the different ways to be creative.

Children demonstrate creative expression through the arts in the following five components:

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**Creative Expression Through the Arts By Age**

Birth – 8 Months	8 – 18 Months	18 – 24 Months
2 – 3 Years	3 – 4 Years	4 Years – Kindergarten
5 – 12 Years	Child care professionals observe typical growth, behavior, and skill expectancies in children across each of the developmental domains according to their age ranges. Refer to An Educator's Guide to Understanding <i>The Florida Early Learning and Developmental Standards: Birth to Kindergarten</i> for more detailed information.	



**Key Point:** Creative Expression Through the Arts is an area of development that helps children learn to use art, music, movement, and imaginative play to communicate their feelings, ideas, and solutions to problems.



## Supporting Creative Expression Through the Arts

Allowing and creating opportunities for children to express themselves creatively is important for healthy development. Children need to stretch their imaginations and experience sensory arts, music, and creative movement to communicate their feelings and ideas.

Examples of supporting creative expression through the arts include:

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**Key Point:** Creative Expression Through the Arts meets an important need for children to express their feelings and ideas in artistic and imaginative ways.



### **Activity: Which Development Domain?**

Match the domain in the left column and its description in the right column.

Domain		
1.	Physical Development	
2.	Approaches to Learning	
3.	Social and Emotional Development	
4.	Language and Literacy	
5.	Mathematical Thinking	
6.	Scientific Inquiry	
7.	Social Studies	
8.	Creative Expression Through the Arts	

Description	
A.	How children feel about themselves and others
B.	Exploring and discovering to learn about the world
C.	Ability to express ideas and feelings, use words, manipulate tools and media, and solve problems
D.	Typical growth patterns, changes in weight and height, gross and fine motor skills, general health and safety, visual perception, and hearing
E.	Basic social understanding beginning with self and family, then expanding to peers and other adults
F.	Eagerness to learn, including curiosity, persistence, creative problem solving, and the ability to create and complete long-term projects
G.	Ability to see, hear, speak, read, write, and construct an understanding of things
H.	Number knowledge, patterns, size, shape awareness, and the relationship between objects and space



### **Activity: Which Age Range?**

Children who are typically developing are able to complete certain skills within specific age ranges. Read the statement and match the age range.

Skill		Age Range
1.	Experimenting with stacking blocks (Scientific Inquiry)	A. Birth – 8 Months
2.	Saying simple words, such as “Yes,” to show understanding (Language and Literacy)	B. 8 – 18 Months
3.	Talking about events and people associated with cultural celebrations (Social Studies)	C. 18 – 24 Months
4.	Using ribbons, scarves, and other props while spinning and moving to music (Creative Expression Through the Arts)	D. 2 – 3 Years
5.	Enjoying and learning from sensory experiences created by using items such as building blocks, art supplies, puzzles, and musical instruments (Approaches to Learning)	E. 3 – 4 Years
6.	Sitting with support (Physical Development)	F. 4 Years – Kindergarten
7.	Crawling to explore the environment (Scientific Inquiry)	G. 5 –12 Years (School Age)
8.	Asking for more cookies when given one or two (Mathematical Thinking)	
9.	Painting on an easel with a variety of brushes (Creative Expression Through the Arts)	
10.	Responding to questions with appropriate answers (Language and Literacy)	
11.	Cooing or babbling when being talked to or sung to (Social and Emotional Development)	
12.	Noticing new things and asking questions about them (Approaches to Learning)	
13.	Able to measure in terms of inches and centimeters, and enjoy measuring with rulers, measuring tape, and yardsticks (Mathematical Thinking)	
14.	Throwing, catching, and kicking a ball (Physical Development)	



## Module 4 Summary

Here is a summary of key points for **Module 4: Developmental Domains**.

A child care professional who is knowledgeable about typical behaviors and abilities of children can support learning new skills and detect problems.

Knowing the typical growth, behavior, and skill expectancies of children across their age range is paramount for caregivers when designing an appropriate learning environment, creating curriculum and learning strategies, and assisting parents in evaluating children's progress.

The Physical Development Domain refers to a child's physical health, growth, and motor development.

Motor development is an important part of physical development.

Since physical development is particularly important during the first five years of a child's life, children should be offered an array of planned physical activities that foster healthy growth, as well as develop fine and gross motor skills.

Approaches to Learning is a unique area of development that focuses on children's motivations and strategies toward learning experiences.

Approaches to learning is important for developing children's eagerness, curiosity, and persistence to learn.

Social and Emotional Development refers to how children feel about themselves and their relationships with others.

Forming friendships with peers is an important part of child growth and development.

Facial expressions are an important way to communicate and interpret emotions.

Social and emotional development is critical to children's overall health and their ability to thrive, develop, and learn.

Language and Literacy is an area of development that refers to children's ability to use language to communicate, read, and write.

Infants and toddlers attach meaning to words and other sounds, and to what they see in the environment.

Daily reading is essential to literacy – the more children read, the better readers and writers they become.

Reading to children should be fun and done multiple times each day.

Daily practice in the skills of writing is essential for children to develop their writing ability.

Language and Literacy is essential for children to learn, communicate, read, and write, as well as to play and work with others.

Mathematical Thinking is an area of development that focuses on children's understanding of numbers and mathematical concepts.

Mathematical Thinking is a significant part of children's development, as mathematics is everywhere and can be used in all areas of learning.

Scientific Inquiry is an area of development that refers to children's exploration and discovery about the world including nature, objects, earth, space, engineering, and technology.

Scientific inquiry is necessary for children to satisfy their natural curiosities and to learn about their environment through exploration, investigation, and observation.

Social Studies is an area of development that begins with children's basic understanding about themselves and their family members before expanding to their peers and other people in their environment.

Social Studies is important for developing children's social and emotional growth in nurturing and respectful environments.

Creative Expression Through the Arts is an area of development that helps children learn to use art, music, movement, and imaginative play to communicate their feelings, ideas, and solutions to problems.

Creative Expression Through the Arts meets an important need for children to express their feelings and ideas in artistic and imaginative ways.



## Module 4 Conclusion

You have completed **Module 4: Developmental Domains**.

You have achieved this module's learning objectives if you can:

- Summarize the developmental domains
- Categorize age ranges and the typical growth, behavior, or skill expectancies in the developmental domains

# Child Growth and Development

## Module 5: Guiding Children's Behaviors

### Overview

This module will provide an overview of how child growth and development principles are applied to guiding children's behaviors.

### Module Goal

Participants will understand best practices associated with guiding children's behaviors towards appropriate expectations, and methods associated with addressing challenging behaviors.

### Learning Objective

After successfully completing this module, you will be able to:

- Identify appropriate behavioral expectations of children in early childhood classrooms
- Apply appropriate techniques for handling challenging behaviors





## Appropriate Behavioral Expectations

The foundation for establishing order in the classroom and helping children maintain their composure is setting clear and realistic rules that define what is expected of children. Knowing what they are supposed to be doing and which behaviors are discouraged helps children to focus on learning opportunities and avoid getting into trouble most of the time. Sometimes children get tired, grumpy, or lose their tempers; being prepared to deal with these types of emotions and outbursts is one of your responsibilities as a caregiver.

Being prepared to deal with unwanted or challenging behaviors in a positive manner is an opportunity to guide children's development and help them learn to control their emotions in a positive way. Caregivers should expect and be prepared to address a wide variety of behaviors including: aggression, biting, hitting, kicking, defiance, rude language, temper tantrums, and bullying.



**Key Point:** When caregivers are prepared to address them, challenging attitudes and behaviors present an opportunity for caregivers to provide positive guidance to children.



## Prosocial Behavior

Prosocial behavior in adults and children represents the most positive attributes of society. Acts of kindness—such as helping, sharing, sympathizing, cooperating, and comforting—benefit all persons, the givers and the receivers. Children who learn to be kind usually are not selfish or aggressive. Providing instruction in prosocial behavior within the child care environment creates a setting in which all learning is enhanced.

- As a child care professional, you can increase children's kindnesses to others by creating situations in which you model the behaviors and attitudes you expect of children.
- Look for instances of positive behaviors and acknowledge them. Actively teach children to think and act with social responsibility.

Positive, respectful attitudes are the result of successful, healthy growth and development. As described by Maslow through his hierarchy of needs, once the higher levels of the pyramid are achieved, individuals attain self-actualization, or the realization of their potential. This often results in a happy demeanor, a positive outlook, and overall healthy development. Helping children achieve this is established by promoting prosocial behaviors in the learning environment and helping children practice them in their daily lives.

### Benefits of Prosocial Behavior

Prosocial behavior is the opposite of antisocial behavior, and includes behaviors such as sharing, cooperating, sympathizing, and comforting. Children, as well as adults, experience positive, rewarding relationships and increased self-esteem as the results of engaging in prosocial behaviors.

### How to Promote Prosocial Behavior

Caregivers are in a unique position to act as role models to children and to model desirable, appropriate behaviors that we want to see reflected in the actions and behavior of the children in care. Since caregivers spend a great deal of time with children, they are also in a position to create a learning environment with an atmosphere that is conducive to encouraging prosocial behaviors in children.

Caregivers who design appropriate learning environments and create an atmosphere that encourages these positive, rewarding behaviors help children establish prosocial behaviors as a positive habit that will benefit them throughout their lives. Be sure to discuss appropriate behaviors and attitudes with children, model prosocial behavior, clearly define expectations, and use appropriate discipline techniques when necessary.



## Self-Discipline

In the early stages, children do not have an innate sense of what is right or wrong. They cannot distinguish between appropriate and inappropriate behaviors and how their actions affect others. They are motivated solely by fulfilling their own needs, and are unaware of how others in the environment are impacted by their behavior. As children progress into the toddler stage, they begin to be influenced by their interactions with adults and caregivers who reward or punish certain behaviors. Without this guidance from adults, children do not learn appropriate behaviors or a sense of morality. For this reason, it is extremely important to clearly define expectations and behaviors to influence a child's growing sense of right and wrong, and to help them establish a sense of self-discipline.

### What is Self-Discipline?

People who are self-disciplined are aware of appropriate behaviors and their effect on others. They are also capable of making decisions that are socially responsible and have a positive effect on their environment.

### Promoting Self-Discipline in Children

Adults and caregivers are the primary people who contribute to a child's ability to become self-disciplined. They must help children learn the positive benefits of prosocial behaviors by rewarding them when they act appropriately, and by using positive guidance strategies to deal with inappropriate or unwanted behaviors and actions.

Caregivers should take an active role in encouraging children to engage in desirable actions and behaviors, such as sharing with others, comforting their peers, and being honest and respectful. Desirable actions and behaviors can be rewarded with praise and appreciation. Conversely, undesirable actions such as aggression, tattling, or selfishness should be discussed with children, putting an emphasis on the negative effects it has on them and others around them.

When children learn to act and react appropriately, resulting in positive relationships and a healthy sense of self-esteem, they gain the ability to function successfully in the wide variety of situations they will experience throughout their lives. Adults and caregivers who successfully instill a sense of self-discipline help children learn to take responsibility for acting appropriately on their own, without a need for others to do it for them.

Caregivers who design appropriate learning environments and create an atmosphere that encourages these positive, rewarding behaviors help children establish prosocial behaviors as a positive habit that will benefit them throughout their lives. Be sure to discuss appropriate behaviors and attitudes with children, model prosocial behavior, clearly define expectations, and use appropriate discipline techniques when necessary.



**Key Point:** Self-discipline in children is established when adults and caregivers successfully teach children how to behave appropriately on their own.



## Addressing Challenging Behaviors

How you address challenging behaviors in the learning environment has a great impact on the effect it will have on children. Effective strategies should always be used when addressing challenging behaviors to ensure that children learn a positive lesson and avoid negatively affecting any of the children in care.

There are a variety of strategies that result in a reduction of negative and challenging behaviors exhibited by children.

- Model appropriate behavior through books, role play, and conversations
- Reinforce positive behaviors through genuine praise
- Reduce the frustration in children's lives and help them feel more competent by providing developmentally appropriate activities and materials
- Foster empathy among children by teaching them about feelings
- Teach children prosocial behaviors
- Help children recognize instances of accidental aggression and identify alternatives
- Make it clear that aggression is unacceptable through clear expectations
- Teach children alternatives to weapon play or aggressive play
- responsibility for acting appropriately on their own, without a need for others to do it for them.

Caregivers who design appropriate learning environments and create an atmosphere that encourages these positive, rewarding behaviors help children establish prosocial behaviors as a positive habit that will benefit them throughout their lives. Be sure to discuss appropriate behaviors and attitudes with children, model prosocial behavior, clearly define expectations, and use appropriate discipline techniques when necessary.



**Key Point:** Successfully addressing challenging behaviors in the child care environment requires a combination of using effective strategies, and avoiding negative or ineffective strategies.

For more information about addressing challenging behaviors, take the Department of Children and Families' course Basic Guidance and Discipline or Challenging Behaviors Awareness and Prevention.



## Module 5 Summary

Here is a summary of key points for **Module 5: Guiding Children's Behaviors**.

When caregivers are prepared to address them, challenging attitudes and behaviors present an opportunity for caregivers to provide positive guidance to children.

Self-discipline in children is established when adults and caregivers successfully teach children how to behave appropriately on their own.

Successfully addressing challenging behaviors in the child care environment requires a combination of using effective strategies, and avoiding negative or ineffective strategies.



## Module 5 Conclusion

You have completed **Module 5: Guiding Children's Behaviors**.

You have achieved this module's learning objectives if you can:

- Identify appropriate behavioral expectations of children in early childhood classrooms
- Apply appropriate techniques for handling challenging behaviors

# Child Growth and Development

## Module 6: Developmentally Appropriate Practice

### Overview

This module will define Developmentally Appropriate Practice and how to use this principle in designing quality care programs for children.

### Module Goal

Participants will understand the role of Developmentally Appropriate Practice in the design of quality care environments.

### Learning Objective

After successfully completing this module, you will be able to:

- Define Developmentally Appropriate Practice (DAP)
- Identify components of developmentally appropriate learning environments
- Plan developmentally appropriate learning experiences





## Characteristics of Developmentally Appropriate Learning Environments

The National Association for the Education of Young Children's (NAEYC) position paper, *Developmentally Appropriate Practice in Early Childhood Programs Serving Children from Birth through 8*, speaks to the value of our work with children. We are the important first link in a child's road to growth.

Read NAEYC's position paper.

In what ways can your child care environment support the concepts found in the excerpt that children will need as they mature?

 **Key Point:** It is important to value the ages and abilities of children in order to make appropriate choices in planning your early childhood classroom.

 **Key Point:** Developing and utilizing high-quality materials and research gives us an understanding of the children in our care, and of the stimulating and responsible curriculum they need to help them reach their maximum potential.



## What is DAP?

Child care professionals who use Developmentally Appropriate Practice make decisions about the education and the well-being of children based on three important sources:

- What you know about how children develop and learn
- What you know about the strengths, needs, and interests of individual children
- What you know about the social and cultural contexts in which the children live

### DAP Defined

Developmentally Appropriate Practice is \_\_\_\_\_ appropriate.

Notes:

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Developmentally Appropriate Practice is \_\_\_\_\_ appropriate.

Notes:

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Developmentally Appropriate Practice is \_\_\_\_\_ and \_\_\_\_\_ appropriate.

Notes:

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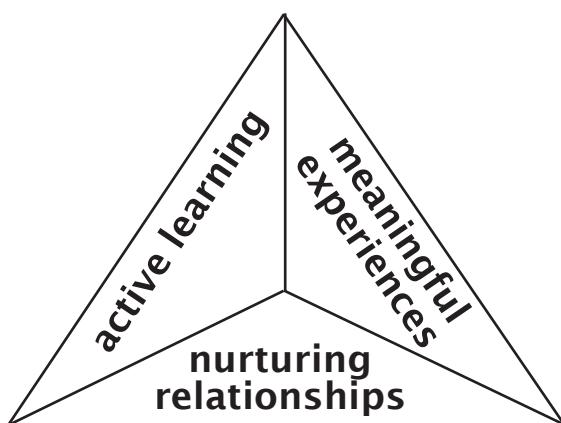


**Key Point:** Developmentally Appropriate Practice (DAP) is defined as curriculum and environments that are age, individually, socially, and culturally appropriate.



**Key Point:** DAP is valuable as a general guideline to support children's learning.

### The DAP Triangle



Active learning: Children learn during the activity by doing.

Meaningful experiences: Children have a fun and memorable time during the activity to which they can relate on a developmental level. The experience relates to their developmental level, cultural background and individual interest. For example, a toddler activity on pets would have more meaning than endangered species. Using water for cooking, cleaning and play has more meaning than "Great Waterways of the World." Likewise, the topics on endangered species and waterways of the world are more appropriate for older children.

Nurturing relationships: The child builds a positive relationship with his/her peers and his classmates during the activity. It is also okay for children to work by themselves.

According to K. Paciorek and J.H. Munro in their book, Notable Selections in Early Childhood Education, action in the learning environment is a sign of good teaching practices:

"Good practice is children in action: children busy constructing, creating with multi-media, enjoying books, exploring, experimenting, inventing, finding out, creating and composing throughout the day. Good practice is teachers in action: teachers busy holding conversations, guiding activities, questioning children, challenging children's thinking, observing, drawing conclusions, and planning and monitoring activities throughout the day."



### **Activity: Selecting Appropriate Activities for Age Groups**

As a child care professional it is important to plan developmentally appropriate activities. Select the age group that appropriately matches the activity.

1. Writing and acting out a simple play
2. Listening to a guest speaker
3. Completing 500 piece puzzles
4. Listening to a story
5. Pasting shapes or stickers
6. Visiting a vegetable garden
7. Pouring water or sand from one container to another
8. Play with play dough
9. Practicing writing ABC's
10. Matching objects and pictures
11. Using Internet for research (with supervision)
12. Identifying letters and sounds
13. Learning songs for parents night
14. Pointing to 5 body parts
15. Doing homework without continual supervision
16. Building a diorama
17. Matching 10 inventors with their inventions

<b>Infant and Toddler Birth to 2 Years</b>	<b>Preschool 3 to 5 Years</b>	<b>School Age 6 to 12 Years</b>



## DAP for Children with Special Needs

Developmentally Appropriate Practice can be modified for children who have developmental delays or special needs.

- Many times their specific needs or delays will not impair their ability to participate in group activities.
- Simple accommodations are often possible.
- It is not acceptable to initiate activities that isolate a child with special needs.
- Children with special needs require an added level of consideration because they:
  - May be at a different developmental level than most children their age group.
  - May have one or more developmental challenges that restrict their participation in group activities.
  - Require more focus on a specific developmental aspect.
  - May feel an added level of frustration with some activities.



**Key Point:** Developmentally Appropriate Practice can, and should, be used to meet the needs of all children.

### Child Care Program Modification Suggestions

Children with special needs want to be able to learn in ways that are similar to children without special needs. While some children with special needs will not be able to participate fully in all play activities, they should be encouraged to participate whenever safe and practical. Modifications to activities should be made to allow children with special needs to participate in group activities.

Children with special needs are capable of utilizing learning centers, but sometimes modifications need to be made to assist them. The participant's guide includes suggestions to assist in adapting learning centers for children with special needs.

#### Children with Motor Impairments:

- Locate centers in areas easily accessible to children in wheelchairs or with braces.
- Provide sufficient space for children who have difficulty moving around.
- Provide nonskid pads on the shelves to prevent materials from falling off.
- Use containers that can be easily grasped, such as a cup with two handles.

#### Children with Visual Impairments:

- Locate learning centers in areas with good lighting.
- Provide tactile cues for the activity.
- Set up activities in a systematic way with tactile dividers separating activities on the shelves.

#### Children with Cognitive Impairments:

- Provide simple activities.
- Organize materials in easy-to-follow steps.
- Carefully demonstrate the use of materials before placing them on the shelves.
- Reinforce a concept being taught by providing many follow-up activities.

#### Children with Behavior Challenges:

- Provide specific, structured steps for the activity.
- Control the number of children at the center at a given time.
- Provide activities that will bring about a soothing effect; for example, water activities.
- Clearly explain the activity and use of materials, but avoid too much talking.



**Key Point:** Modifications to activities should be made to allow children with special needs to participate in group activities and learning centers.



### **Activity: Putting the Puzzle Together**

Think about how you might address the special needs of each of the following four-year-old children while you are teaching them to complete a twenty-piece puzzle.

A child who is physically challenged

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A child who is socially challenged

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A child who is shy or emotionally challenged

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A child who is gifted

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A child who is mentally challenged

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## DAP for Culturally-Diverse Classrooms

Using Developmentally Appropriate Practice contributes to meeting the needs of a culturally diverse classroom. Culture is the impact that a person's immediate society has on how a person perceives and reacts to the world. Florida has people from many diverse cultural groups, so it is important to consider the impact of a child's cultural background when involving them in an activity.

The cultural differences that children bring to a child care setting are important because they bring a different perspective of the world in which we live. Cultural differences are significant because they define the identity of the child. It is the responsibility of child care professionals to:

- Be aware of and respect each family's/child's cultural practices
- Provide opportunities for children to learn about their own culture and each other's cultures through stories, songs, poems, pictures, and visitors to the classroom; and toys, materials, props for dramatic play

Developmentally appropriate activities should be considered with the child's or group's cultural differences in mind. This can be done by designing activities that:

Embrace ideas from many different cultures

- Allow for children to explore their cultural heritage
- Avoid stereotypes
- Include examples that span all cultures, and are not too focused on any one culture

Remember that cultural differences generally include language, clothing, food, and religion.

When considering how to work with children, it is important to:

- Become aware of the needs of a child that require accommodations – becoming well informed about modifications or additions you may need to make in activities will ensure the child's inclusion with other children
- Accept the differences, rather than trying to change the child. You, and the other children, should show a willingness to treat the child as an equal member of the group
- As the children work side by side, they will warm your heart as they express their appreciation of their friend who is different from them



**Key Point:** When working with children with special needs—or children from different cultures—it is important to be aware of, and accept and appreciate, the differences.



## Play as a Developmentally Appropriate Practice

People learn fastest by doing. The level at which a child is involved in play can vary from watching and listening to actively participating. The more involved a child is in a learning experience, the \_\_\_\_\_ the child will learn.

When have you observed children rapidly learning a skill or idea through play?

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- Play contributes positively to child development.
- Learning in the Physical Development, Approaches to Learning, Social and Emotional Development, Language and Literacy, Mathematical Thinking, Scientific Inquiry, Social Studies, and Creative Expression Through the Arts domains is supported by play.
- Early learning relies on play experiences in which children have many opportunities to make their own choices and decisions, initiate interactions, assume responsibilities, care about the needs of others, and be challenged by tasks that prompt them to stretch.
- Developmental progress does not occur during repetitive, mindless activities.

### Musical Play

- Musical play includes activities such as dancing, singing and playing simple instruments.
- Music includes all areas of child development: Physical Development, Approaches to Learning, Social and Emotional Development, Language and Literacy, Mathematical Thinking, Scientific Inquiry, Social Studies, and Creative Expression Through the Arts.
- Music communicates emotion and seems to come naturally to young children.
- As children age, they generally become interested in the music listened to by their peer group.
- You can help them explore various types of music and the music of various cultures.

### Constructive Play

- Constructive play includes activities such as building with interlocking blocks or toy logs, and using tools.
- Children enjoy using all sorts of manipulatives.
- Manipulatives enhance fine motor development by requiring the controlled use of hand and finger muscles; they also help develop important eye-hand coordination.
- As children experiment with building, they learn about important concepts such as gravity, stability, and patterning.

### Artistic Play

- Artistic play includes activities such as sculpting with play dough, painting, cutting, sewing, and drawing.
- There are two camps of thought about how to provide art experiences.
- For some, art consists of planning seasonally-directed activities such as ironing leaves between sheets of waxed paper, making tissue ghosts, and creating turkeys by drawing around a child's hand.
- For others, art experiences consist of putting out art materials and letting children explore and create without adult direction or interference.
- Art educators have long argued against the practice of giving young children art projects that are limited to look-alike products.
- They argue that these activities do nothing to improve children's abilities to engage in imaginative thinking, pose and solve problems, develop meaningful art skills, or express ideas in visual ways.
- Learning to draw is sometimes compared to learning to talk. Scribbling parallels babbling; single discrete forms, such as circles, become the equivalent of first words; and recognizable pictures are like sentences and paragraphs.

### **Cognitive Play**

- Cognitive play includes activities such as solving puzzles, counting, classifying, and sorting.
- When children do these types of activities they learn to notice details, likenesses, and differences; and to form categories.
- They learn concepts, such as color, size, shape, and number.
- They develop logical reasoning skills.

### **Exploratory Play**

- Exploratory play includes activities such as playing with sand/water, planting plants, and caring for pets.
- Sand and water tables provide an environment for children to explore.
- Items, such as egg cartons, measuring cups and spoons, feathers, and shells added to sand tables; and egg beaters, aquarium rocks, strainers and squeeze bottles added to water tables provide children with tactile experiences.
- Children can be taught the concepts of humane treatment of living things, as well as responsibility, as they learn to feed the classroom pets and water the plants.

### **Dramatic Play**

- Dramatic play includes activities where children pretend; for example, "I'm the mommy, you be the baby." "Let's play school." and "Let's pretend that..."
- All of these fantasies are real in the minds of children who are engaged in dramatic play.
- Carefree, creative dramatic play promotes cognitive development and helps children learn how to share, communicate, and cooperate with each other.
- Through role playing, children also learn how to develop empathy for others.

### **Language Play**

- Language play includes reading and writing.
- Theorist Lev Vygotsky proposed that the development of symbolic thinking, oral language, and literate behavior occur together; and that the development of written language is related to oral language.
- Vygotsky suggested that children be provided with writing experiences that are relevant and meaningful to their lives.
- Writing should be taught naturally in ongoing social interactions in the course of children's play.



**Key Point:** Play contributes positively to child development in all of the learning domains.



## Learning Centers

Learning centers are designated areas in a child care program that are devoted to a particular domain of play.

How do learning centers support a child's development?

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What is the child caregiver's role in using learning centers?

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For more information about creating developmentally appropriate learning centers in your child care environment, take the Department of Children and Families' course *Understanding Developmentally Appropriate Practices*.

**Key Point:** Learning centers are designated areas in a child care program that are devoted to groups of activities related to a type of play experience, which support a variety of learning domains.



## Learning Experience Planning

Many child care professionals use this lesson chart format—or one similar to it—when planning lessons, to ensure that:

- All domains are reflected in the children's activities each day
- There are a variety of activities and materials in use
- You can keep track of what materials and activities have been used with a specific age group
- Your notated charts (what worked, what did not) are used as the basis for making improvements in next year's planning
- Reading activities must be implemented every day
- You vary activities to include: whole group, small group, and individual

Thanks to Lois Astern, a certified DCF Child Care Training Professional who provided her planning charts from which we have adapted the following material. In this example, only random squares have been completed so you can practice planning.

**Key Point:** Child care professionals need to plan a variety of activities and materials for each day by using a planning tool to ensure that learning is central to the activities experienced by the children.



## Weekly Block Planning

### Weekly Block Plan

Class Age 12 to 15 Months Teacher(s) \_\_\_\_\_ Week of \_\_\_\_\_

Theme My Body - Social & Emotional Domain: "Pointing to & naming several of their body features" expectancy

Day of the Week	Physical Development (Fine and Gross Motor)	App. to Learning (Role Play)	Cognitive Development (Science/Social Studies)	Language & Communication (Pre Reading)	Cognitive Development (Creative Arts)
MON		Use a play kitchen to have children act out their experiences & observations with cooking, etc.			Starting each day with the song, "Head, Shoulders, Knees and Toes"
TUE				Point & name the head, nose, mouth, ears & eyes. Have signs with pictures and name of parts.	
WED	Outdoor: Setting up a maze for them to walk or crawl through both forward and backward.		Hide pictures of parts of the body around the room. Seek them out.		
THU				Show pictures of the body with clothing. Ask what kind of clothes goes on which part of the body?	
FRI	Indoor: Feeding themselves with finger food; beginning to use a spoon.		Sitting still while being read to. Use short books with many pictures.		↓

## Weekly Block Plan For Preschool (3's, 4's, Pre-K)

**Class Age** 4 Year Olds **Teacher(s)** \_\_\_\_\_ **Week of** \_\_\_\_\_  
**Theme** Going to the Store (Addresses multiple domains and expectancies, see chart)

Day of the Week	Physical Development (Fine and Gross Motor)	Cognitive Development (Creative Arts)	Language & Communication (Pre Reading)	Approaches to Learning	Cognitive Development	Social & Emotional	Health, Safety, & Nutrition
MON		Using an appliance box, children draw on it to turn it into a grocery store.					Show the children some food products. Have them choose which ones are more healthy.
TUE	Give children zip-lock bags of Fruit Loops. Have them sort by color and count them by 5's.				Review simple shapes. Have children identify those shapes on food packages.		
WED		Play a series of commercials you have pre-recorded. Ask children what they are selling.			Measure the number of 1/4 cups in a box of Fruit Loops		Discuss and plan for healthy snacks for the class.
THU			Read "Everybody Cooks Rice" to the class. Point out and explain new vocabulary words.	Dramatic Play. Let children play with grocery store box, props and be customers and clerks.			
FRI						Ask, What stores and restaurants welcome children? How do you know?	



### **Activity: Old MacDonald Had a Farm**

Mrs. Clark gathered the children for morning circle and had them sing Old MacDonald Had a Farm, a song all the children know. She explains that it is a song that has been around for a long time. Even their parents probably learned that song when they were younger. She asks them:

- What do farmers do?
- Are there women who are farmers? How do you know?
- Have you ever been to a farm?
- What did you see?

What learning activities can Mrs. Clark do to emphasize each of the six domains using the song as a beginning point for the activities?

#### **OLD MCDONALD LEARNING ACTIVITIES**

Domains	Learning Activity
Physical Development	
Social and Emotional Development	
Approaches to Learning	
Language and Literacy	
Scientific Inquiry	



## Module 6 Summary

Here is a summary of key points for **Module 6: Developmentally Appropriate Practice**.

It is important to value the ages and abilities of children in order to make appropriate choices in planning your early childhood classroom.

Developing and utilizing high-quality materials and research gives us an understanding of the children in our care, and of the stimulating and responsible curriculum they need to help them reach their maximum potential.

Developmentally Appropriate Practice (DAP) is defined as curriculum and environments that are age, individually, socially, and culturally appropriate.

DAP is valuable as a general guideline to support children's learning.

Developmentally Appropriate Practice can, and should, be used to meet the needs of all children.

Modifications to activities should be made to allow children with special needs to participate in group activities and learning centers.

When working with children with special needs—or children from different cultures—it is important to be aware of, and accept and appreciate, the differences.

Play contributes positively to child development in all of the learning domains.

Learning centers are designated areas in a child care program that are devoted to groups of activities related to a type of play experience, which support a variety of learning domains.

Child care professionals need to plan a variety of activities and materials for each day by using a planning tool to ensure that learning is central to the activities experienced by the children.



## Module 6 Conclusion

You have completed **Module 6: Developmentally Appropriate Practice**.

You have achieved this module's learning objectives if you can:

- Define Developmentally Appropriate Practice (DAP)
- Identify components of developmentally appropriate learning environments
- Plan developmentally appropriate learning experience