



LEARN THE FUNDAMENTAL FACTS OF A CHILD'S FIRST FIVE YEARS

UNDERSTANDING BRAIN DEVELOPMENT

Introduction to

Early Childhood Development:

Infant, Toddler, and Preschool





Early Childhood Development: Infant, Toddler, and Preschool

Dr. Theresa Vadala

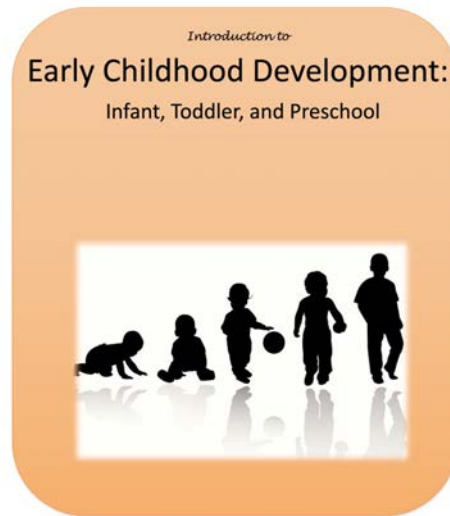
Child Care Training Consultants, LLC

Las Vegas, Nevada 89139



Child Care Training Consultants, LLC
Accredited by International Association for Continuing Education and Training (IACET)

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UNDERSTANDING BRAIN DEVELOPMENT



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Applying New Knowledge:
Learning & Transfer

Child Care Training Consultants, LLC

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PRESCHOOL Module 8

CDA Subject Area 8: Understanding principles of child development and learning

Title: CDA CHDV 8.E Child Development: Infant, Toddler, Preschool

3 Hours

0.3 CEUs



Dr. Theresa Vadala
(Instructor & Curriculum Designer)





**Thank you for choosing
Child Care Training Consultants, LLC.,
for your CDA Training Needs!**

Learning Assessment

Read the material provided, take the 5-10 quiz questions and
complete the training evaluation at the end of the course.

Participants must receive 100% on individual courses to obtain a certificate of completion.

Questions?

We are happy to help.

Support Services:

Please contact us 24/7 at

childcaretrainingconsultants1@gmail.com

Business # 702.837.2434



Child Care Training Consultants LLC., Goal

The goal is to empower educators as they take Child Development Associate (CDA) courses to make a powerful difference in the lives of young children!

Mission Statement

“Child Care Training Consultants, LLC’s is committed to provide research-based professional growth and development training courses primarily focused on the Child Development Associate. The CDA is the nation’s premier credential that is transferable, valid, competency-based and nationally recognized in all 50 states, territories, the District of Columbia, community colleges and the United State Military.

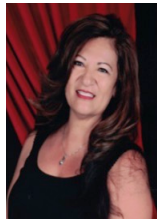
Vision

Child Care Training Consultants, LLC’s vision is to provide the early childhood community with courses based on CDA competency standards to obtain their CDA Credential and assist in reaching their goal as an exceptional early childhood educator to ultimately achieve higher child outcomes.



About the Instructor

Theresa has over 30 years experience in the field of Early Childhood Education. During that time, she served as a Preschool Teacher, Disabilities Coordinator, Program Facilitator, and Director of an Early Childcare Program. She has a Doctoral Degree in Educational Leadership with Specialization in Curriculum and Instructional Design. Theresa is a Professional Growth & Development Trainer and Curriculum Designer and offers web-based courses internationally. She is the Executive Director/Owner of of the training organization Child Care Training Consultants, LLC., (CCTC).



Business Description

Child Care Training Consultants, LLC. (CCTC) is an accredited provider (AP) with the International Association for Continuing Education and Training (IACET) that provides Continuing Education Units (CEU) for adult education nationally. The business is also a recognized training organization with the Council for Professional Recognition, Child Development Associate Council (CDA), National Credentialing Program.



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Welcome

Welcome

The years before a child reaches kindergarten are among the most critical in his or her life to influence learning. Early childhood educators are responsible for preparing children from birth to the age of 8 for the formal education system. All children deserve a quality childhood so they become joyful, lifelong learners, active contributors to healthy communities, and productive members of society. Understanding Early Childhood Development will help develop a quality classroom.

Introduction

This Self-Study Guide is designed to provide child care providers and administrators the fundamental facts of a child's first five years and an understanding of infant brain development.

Purpose

The purpose of this Self-Study Guide is to prepare child care providers to better identify, interpret, and respond to a child's individual differences. Learners will gain deep knowledge of the complex interaction about how the infant brain development effects the role of environmental factors, ability to identify developmental domains, and the role of family and inclusion I child development.



Learning Objectives & Outcomes

Goal/s

The goal of this training content is to provide learners with fundamental facts of a child first five years of life through an understanding of brain development in infants.

Objectives

By the end of this course learners will be able to:

- 1) Recognize the various levels of brain activity and identify windows of opportunity when infants thrive.
- 2) Identify bonding attachment during toddler-preschool years.
- 3) Implement methods of early childhood inclusion and family engagement.

Learning Outcomes

- 1) Explain, describe, answer, define and reflect on the various levels of brain activity and windows of opportunity when infants thrive.
- 2) Describe, explain, and summarize child development milestones and developmental areas.
- 3) Develop a lesson plan and action plan that includes inclusion and family engagement.



Objectives, Activities, Learning Outcomes, & Transfer of Learning

Objectives	Activities/Exercises	Learning Outcomes Learners will be able to:	Transfer of Learning Strategies
1) Outlining Child Development Theorists	EXERCISE 1.0 ASSIGNMENT ON THEORISTS Video	Construct a summary regarding a child development theorists.	Use the understanding of developmental theorist to identify in the workplace.
2) Recognize the various levels of brain activity and identify windows of opportunity when infants thrive.	EXERCISE 2.1 THE BRAIN, SIMPLE CIRCUITS, AND THE NERVOUS SYSTEM EXERCISE 2.2 THE BASIC BRAIN ARCHITECTURE EXERCISE 2.3 UNDERSTANDING THE BRAIN EXERCISE 2.4 DEFINING SYNAPTIC DENSITY EXERCISE 2.5 WIRING OF THE BRAIN EXERCISE 2.6 IDENTIFYING RISK FACTORS EXERCISE 2.7 CRYING INFANTS: TO SPOIL OR NOT TO SPOIL EXERCISE 2.8 WHAT AN INFANT LEARNS: COMPARE AND CONTRAST	Explain, describe, answer, define and reflect on the various levels of brain activity and windows of opportunity when infants thrive.	Use the understanding of the brain to develop infant activities.
3) Identify bonding attachment during toddler-preschool years.	EXERCISE 3.1 EXPERIENCING THE ATTACHMENT BOND EXERCISE 3.2 PHYSICAL DEVELOPMENT ACTIVITIES: GROSS & FINE MOTOR EXERCISE 3.3 SUMMARIZE COGNITIVE DEVELOPMENT AND CAREGIVERS ROLE EXERCISE 3.4 SUMMARIZE HOW A CHILD COMMUNICATES THEIR EMOTIONS	Describe, explain, and summarize child development milestones and developmental areas.	Use the growth and development milestones to develop activities to use in the classroom settings.
4) Implement methods of early childhood inclusion and family engagement.	EXERCISE 4.1 DEVELOP A LESSON PLAN EXERCISE 4.2 DEFINE FEATURES OF INCLUSION EXERCISE 4.3 DEVELOP AN ACTION PLAN	Develop a lesson plan and action plan that includes inclusion and family engagement.	Develop a lesson plan that includes strategies to use in daily teaching experiences. Create an action plan based on the recommendation provided to use in future lesson planning.



Research

Research shows that a child's earliest years present a window of opportunity and improve outcomes later in life. The potential benefits from supporting early childhood development (ECD) range from improved growth and development to better schooling outcomes to increased productivity in life. Children develop rapidly during their early years, and positive or negative experiences have implications for children's well-being, school readiness, and later success in life. From an education perspective, early gaps in cognitive skills jeopardize a child's capacity and motivation to learn upon primary school entry. Low levels of school readiness can lead to costly inefficiencies in the education system as these children are more likely to have poor academic performance, repeat grades, and drop out of school before they complete the primary cycle.



Agenda

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Theorists

Child Development Theorists

The following video explains child development from the viewpoints and research of key theorists. The content on this training is based on the work of some of psychology's best-known thinkers that have developed theories to help explore and explain different aspects of child development. While not all of these theories are fully accepted today, they all had an important influence on our understanding of child development. Today, contemporary psychologists often draw on a variety of theories and perspectives in order to understand how kids grow, behave, and think.

[Click Here to View Video \(20 minutes\)](#)

Major Child Development Theorists

- **Jean Piaget** – Children must be given learning tasks appropriate to their level of development.
- **Lev Vygotsky** – Children should be given the opportunity for frequent social interaction. Social contact is essential to intellectual development.
- **Erik Erikson** – Parents & other caregivers must be aware of, and sensitive to, children's needs at each stage of development and support them through crises.
- **B.F. Skinner** – Parents and other caregivers can affect a child's behavior through the use of negative and positive feedback.
- **Albert Bandura** – Caregivers must provide good examples for children to follow.
- **Urie Bronfenbrenner** – Child's primary relationship with a caregiver needs to be stable, loving, and lasting. Environment affects development.
- **Arnold Gesell** - Development genetically determined by universal "maturation patterns" which occur in a predictable sequence.

EXERCISE 1.1 ASSIGNMENT ON THEORISTS

Select a theorist from the video and summarize in 75-100 words the key points and how any of these components are evident in the workplace.

(See Appendixes for Assignment Template)



Infants and Toddlers

Amazing growth takes place during the first years of life. The brain is the only unfinished organ at birth. Early child development is a foundation for community development and economic development, as capable children become the foundation of a prosperous and sustainable society.

The interactive influences of genes and experience literally shape the architecture of the developing brain, and the active ingredient is the “serve and return” nature of children’s engagement in relationships with their parents and other caregivers in their family or community. Both brain architecture and developing abilities are built “from the bottom up,” with simple circuits and skills providing the scaffolding for more advanced circuits and skills over time.

Stress in early childhood is associated with persistent effects on the nervous system and stress hormone systems that can damage developing brain architecture and lead to lifelong problems in learning, behavior, and both physical and mental health. For infants and toddlers there is amazing growth that takes place during the first years of life. In fact, the brain is the only unfinished organ at birth. The brain needs time and experience to grow and

EXERCISE 2.1 THE BRAIN, SIMPLE CIRCUITS, AND THE NERVOUS SYSTEM

1)The brain is the only _____ organ at birth.

2)Both brain _____ and _____ are built “from the bottom up,” with simple circuits and skills providing the scaffolding for more advanced circuits and skills over time.

3)Explain how stress affects the nervous system:



Brain Development in Infants

“Brain development begins before birth, within a week of conception. During the prenatal period, brain cells are already busy sending and receiving sensory messages of touch, hearing and movement.”

(Moon, 2012)

The basic architecture of the brain is constructed through an ongoing process that begins before birth and continues into adulthood. Like the construction of a home, the building process begins with laying the foundation, framing the rooms, and wiring the electrical system in a predictable sequence, and it continues with the incorporation of distinctive features that reflect increasing individuality over time.

Brain architecture is built over a succession of “sensitive periods,” each of which is associated with the formation of specific circuits that are associated with specific abilities. The development of increasingly complex skills and their underlying circuits builds on the circuits and skills that were formed earlier. Through this process, early experiences create a foundation for lifelong learning, behavior, and both physical and mental health. A strong foundation in the early years increases the probability of positive outcomes and a weak foundation increases the odds of later difficulties.



EXERCISE 2.2 THE BASIC BRAIN ARCHITECTURE

Moon, (2012) describes the basic brain architecture. Explain in your own words what is meant by brain architecture:

Moon, G. 2012. The amazing infants brain. Washington, DC: American Psychological Association.



Understanding the Brain

The brain is like a three-dimensional puzzle where you need to connect the dots. “Dots” or brain cells called neurons follow specific pathways. Neurons have “arms” called dendrites which grow and make connections with other neurons. Think of the brain as a three-dimensional puzzle where you need to connect the dots. The brain is composed of highly integrated sets of neural circuits (i.e., connections among brain cells) that are “wired” under the continuous and mutual influences of both genetics and environment. Genes determine when specific brain circuits are formed, and individual experiences then shape how that formation unfolds. This developmental process is fueled by a self-initiated, inborn drive toward competence that is an essential characteristic of human nature.

Appropriate sensory input (e.g., through hearing and vision) and stable, responsive relationships build healthy brain architecture that provides a strong foundation for lifelong learning, behavior, and health. The most important relationships begin in the family but often also involve other adults who play important roles in the lives of young children, including providers of early care and education. In early childhood development, young children naturally reach out for interaction through babbling, facial expressions, words, gestures, and cries, and adults respond by getting in sync and doing the same kind of vocalizing and gesturing back at them. Decades of research tell us that mutually rewarding interactions are essential prerequisites for the development of healthy brain circuits and increasingly complex skills.

EXERCISE 2.3 UNDERSTANDING THE BRAIN

1) Why is appropriate sensory important? _____

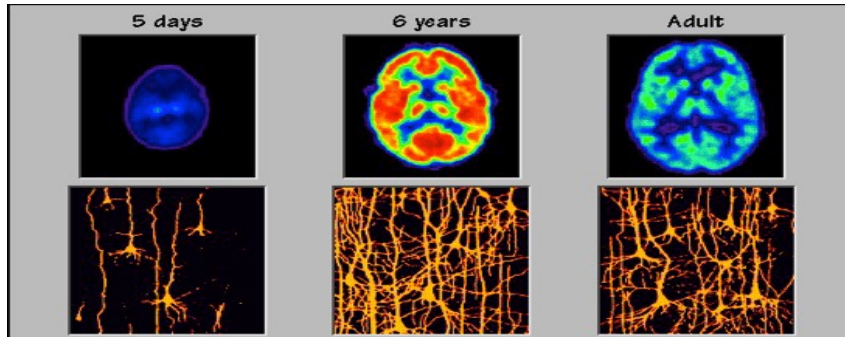
What are essential prerequisites for the development of healthy brain circuits? _____

2) According to the reading, what is the brain composed of? _____



Synaptic Density

Synapses are structures in neurons that allow for the transmission of electrical and chemical signals to neighboring cells. Plasticity of synapses, their maturation, and the development of how they are formed has been shown to reflect selective strengthening and weakening of connections between cells thought to underlie processes of learning and attention.



This photo shows changes in what scientists call *Synaptic Density* over time. Synaptic density shows the culmination of all the experiences of the young child, good and bad.

Three views:

1) At birth (left) child has most of the neurons they will have in life, but relatively few connectors or synapses. (New discoveries indicate that in certain brain structures we actually do create some new neurons daily).

2) At 6 years (middle), child's brain is dense with neural trees with bushy dendrites and billions of spines. The scan shows an explosion of activity - NO wonder 6 year olds are so active and hard to settle. At these ages, learning is nearly effortless, and self-control is yet to be developed in the inhibitory pathways within this over connected mass.

3) At 14 years (right) a young teenager's synaptic activity includes pruning away sets of connections rarely used and not welded into permanent circuits. Teen years are filled with physiological and emotional change identity formation. Most pruning away of synaptic density occurs between ages 10-18 - unseen, unfelt, the process can continue into age forty.

- The brain has amazing capacity for plasticity (compensation and adaptation), especially in first decade.

- Synapses are created with astonishing speed during first three years of life.

- Branching (connecting) is known as SYNAPTIC DENSITY.



Synaptic Density (Cont.)

The brain cells or neurons are busy making lots of connections. The connections are called synapses. When a child interacts or learns something the synapses form bridges called neural pathways or pathways to learning. The more the brain is stimulated, the more bridges are formed and the stronger the child's intellect or ability to make sense of new experiences. New experiences are important during the first years of life so that children are making strong connections. Excess amount of neurons and synapses allows for adaptation to many different conditions and settings. A child is biologically primed for learning and Synaptic Density is at its peak at three years of age. This process remains highly active throughout Childhood.

EXERCISE 2.4 DEFINING SYNAPTIC DENSITY

1) What is meant by "pruning away" of synaptic activity between ages 10-18? _____

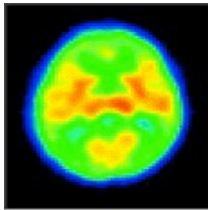
2) When is synaptic activity at its peak? _____

3) Why are new experiences important during the first year of life? _____

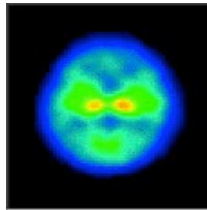


RAPID EARLY DEVELOPMENT PET SCAN

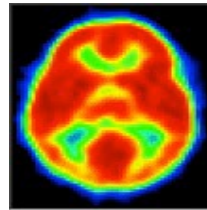
Birth



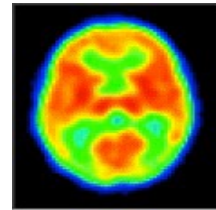
3 months



6 months



1 year



The colors indicate the levels of brain activity. Red indicates a more active brain area and blue less active brain areas.

The brain architecture is fully developed by one year!

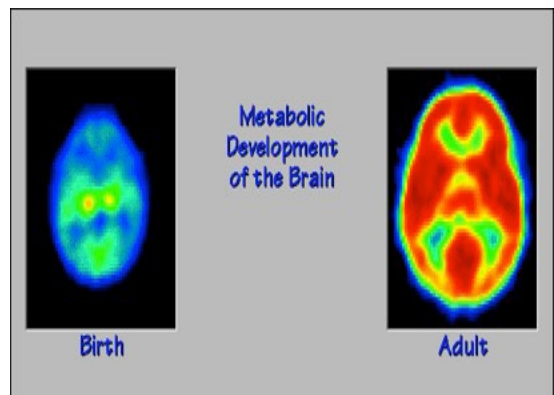
Concrete evidence:

Take a close look at this photos. What stands out to you?

Compare the brains of a 5 day old newborn, a 2 month old infant, a one year old, and a 28 year old adult. What changes do you see?

The architecture (structure) of the one year old brain is far more similar to the 28 year old brain than it is to the newborn infant brain at 5 days.

- A child's brain is 75% developed by age 1
- And 90% developed by age 3



✦✦ Interesting Fact!

If a child's whole body grew at a similar rate, the child would weigh 170 pounds by year 1!



Wiring of the Brain

The brain is remarkably unfinished at birth, but quickly begins to wire up itself in response to the environment. The brain is a pattern seeking organ! An infant’s brain begins to search out the environment, detecting patterns (similarities and differences, beginnings and endings) right from the start. Wiring up of the brain comes after birth. A child’s brain NOT just a smaller version of an adult brain. A child is born with basic building blocks, but only approximately 25% wired up at birth with 100 billion neurons and potential for a thousand trillion synapses. Seventy-five percent of a child’s brain is wired at one year and 90% is wired by three years of age. A child actively seeks out and uses the environment to complete wiring forming and re-forming of neural connections and is the central task of early brain development.

EXERCISE 2.5 WIRING OF THE BRAIN

1) What is meant by the brain being a “pattern seeking” organ?

2) How much of a child’s brain is wired at one year of age? _____

3) Explain why the environment is important especially after birth:



Windows of Opportunity for Brain Connections

Area	Critical Window	Enhancement
Language	4-8 months	8 mo. to 6 years
Trust	Birth to 14 months	14 mo. to 8 years
Vision	Birth to 24 months	2 to 6 years

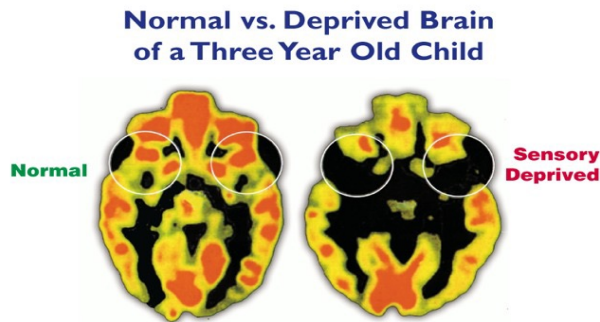
This is an example of some of the windows of opportunities that are critical or the most important time for the brain to make connections. For language the most important time to begin that development of language is 4-8 months with enhancement up to age six years. A person can continue to learn language but the critical foundation is laid during the first 6 years of life. The critical window of opportunity for building trust is from birth to 14 months with the critical foundation of eight years old. Birth to 24 months is the critical window of opportunity for vision with the enhancement period from two to six years of age.

These windows of opportunity are crucial for infants, toddlers, and preschoolers. These are their most vulnerable year to develop language, vision and build trust. It is those mental and physical sensory experiences, by themselves, that establish the critical windows of opportunity in your child’s evolving brain. When your child repeats an experience, it establishes a track in his/her brain and if that experience is repeated consistently, the synaptic lesson will not be reversed. If these critical times for learning are missed, they may never be recovered.

Additionally, the important window specifically for language acquisition begins to shut down by the age of 5. Children can learn many languages simply by being exposed to them during the language window of opportunity, and they can learn those languages simultaneously. However, if your child is introduced to and acquires a new language at the onset of adolescence, then that language will be spoken with a foreign accent because your child did not track that language during the optimal window for language acquisition. These critical periods impact all of learning, including visual development, social/emotional development, intellectual development, sensory and motor development, musical ability and so on.



This picture shows the effects on the brain if a child does not receive sensory stimulation. Parts of the brain never make the important connections and the child will face challenges the rest of their life in different areas.



Source: Newsweek, Spring/Summer 1997 Special Edition:
"Your Child: From Birth to Three", pp. 30-31.

Now that we can look inside a brain using PET scans, MRI's and functional MRI's, science is helping us see what a young brain needs to wire-up well. Studies have also been done that show what deprivation can do to a developing brain. This next section will focus on abuse and neglect. (Interpret the scans for participants using the following information):

- Red and yellow show higher activation or use
- Dark blue and black show such little activation that areas are barely active
- Even unsophisticated viewers can see negative developmental outcomes due to neglect, abuse and sustained stress

Areas responsible for ability to focus attention are very compromised and represent a huge challenge in the ability to learn school-related skills that require focused attention.

The scan on the right shows certain patterns of development related to deprivation:

- Certain areas of brain susceptible to effects of early trauma
- Children were fed, kept clean, and were well dressed
- Didn't get enough human contact

A young brain that is well-wired needs:

- Enough one-on-one attention from a loving caregiver
- From the same, loving caregiver
- People-time; face-time; one-to-one, predictable responsive care



Child Development Risk Factors

Many factors can disrupt early child development. Four risk factors affect at least 20–25% of infants and young children in developing countries: malnutrition that is chronic and severe enough to cause growth stunting, inadequate stimulation or learning opportunities. Developing an early emotional connection to a caregiver is also critical for an infant’s well- being. Absence of attachment to a consistent caregiver can have significant negative effects on brain development and cognitive functioning.

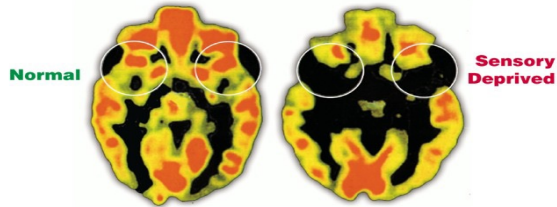
EXERCISE 2.6 IDENTIFYING RISK FACTORS

What is the difference between the scan on the left (normal) and the scan (sensory deprived) on the right? Explain.

Identify and list four main risk factors that can disrupt early childhood development.



Normal vs. Deprived Brain of a Three Year Old Child



Source: Newsweek, Spring/Summer 1997 Special Edition: "Your Child: From Birth to Three", pp. 30-31.

Children and Language Development

An infant's brain is programmed to perceive all the different sounds and speech patterns of any of the languages in the world. The brain's wiring is shaped by the language(s) spoken in the home. The more stimulating the early environment, the more a child develops and learns. Language and cognitive development are especially important during the first six months to three years of life. When children spend their early years in a less stimulating, or less emotionally and physically supportive environment, brain development is affected and leads to cognitive, social and behavioral delays. Later in life, these children will have difficulty dealing with complex situations and environments. High levels of adversity and stress during early childhood can increase the risk of stress-related disease and learning problems well into the adult years.

Speech and Language Development

Many children in the early stages of language development have difficulty classifying and speaking certain sounds

- Age 3: M, N, P, H, W, B
- Age 4: F, D, K, G
- Age 5: Y, NG, T
- Age 6: L, SH, CH, V, R
- Age 7: S, Z, J, ZH, TH



Children's language develops through a series of identifiable stages in language development. If a child is exposed to a rich language environment, this will be reflected in his/her speech development.



Responding to an Infants Crying

Research has found if a baby gets a quick response when he cries, he/she will be less likely to cry and be demanding as a toddler. Responding to a baby helps him/her develop trust and security. Newborns cry because they have basic needs; to be fed, held, comforted, and loved. Their needs are actually the same as their wants at this age. As care givers, it is your job to listen to your instincts and respond to those needs and wants as best you can. If that means toting the infant around in a sling while you are working or getting up every time the infant cries. You will not spoil a baby by picking him/her up when he/she cries. That won't spoil an infant. Far from it. When you respond to the newborn's cries and try to meet her needs, you're teaching him/her to feel secure and confident. That security and confidence will result

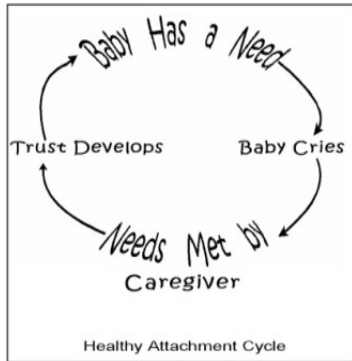
EXERCISE 2.7 CRYING INFANTS: TO SPOIL OR NOT TO SPOIL) feel a deep trust in their parents tend to develop a secure sense of self that helps them self-soothe later on.

Think about the infants in your care. What do you do when he/she cries? What is your first thought or reaction? (Be honest.)

Most times caregivers pick up a crying infant so he/she will stop crying. Are you aware of the impact you make on an infant when you respond to their crying? Will you spoil them when you pick them up? Explain why or why not.



Healthy Attachment Cycle



Trust develops when needs are met. When baby's needs are met consistently, a typical CYCLE OF NEEDS develops trust between caregiver and child. The diagram shows First Year Healthy Attachment Cycle:

- Baby signals need by crying.
- Caregiver comes, soothes, and meets needs.
- When repeated over and over again by same caregiver, baby learns to trust.

If successful going through First Year Healthy Attachment Cycle, most likely will proceed through second year Secure Attachment Cycle.

Disturbed Attachment Cycle

In the Disturbed Attachment Cycle, the baby's needs are not met in a consistent, appropriate way.

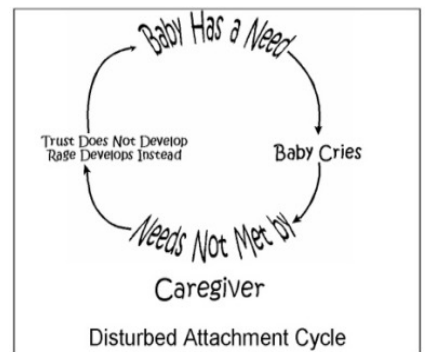
Various causes include:

- The baby expresses a need and cries, but this time the need is not met by the parent or caregiver
- Or perhaps the need is inconsistently met, or different caregivers are not attuned to the baby
- Sometimes cries go unanswered (neglect) or are met with physical abuse

The result is that the baby learns:

- That this world is an unsafe place
- That he/she must take care of him/herself
- That he/she can trust no one to meet his needs

Instead of trust developing, rage develops and is internalized. This child learns that he/she must be in charge of their own life for their very survival.





What an Infant Learns

- I am listened to or not
- What I choose to do is valued or it isn't
- How I express my emotions is accepted or it isn't
- I am allowed to explore or I am not
- Mostly my needs are met or they are not



EXERCISE 2.8 WHAT AN INFANT LEARNS: COMPARE AND CONTRAST

A baby who's secure in his/her bond with his/her caregivers is a happier, less-needy baby; and becomes an older baby who has the courage to take on the world *without clinging to you*.

Compare and contrast what an infant learns when you pick him/her up and when you do not pick them up:



Section II

Play and the Toddler, Preschool Years

Bonding and Attachment

Growth & Development

Developmental Milestones

Four Developmental Areas



Play & the Toddler Years



“Through play, the brain builds and strengthens connections which become the patterns of physical, emotional, cognitive and social development”

Bruno, 1997; Hyson, 2004

As the child moves into the toddler years, their play will become more imaginative and complex. Through play, he'll exercise key skills and qualities, such as independence, creativity, curiosity, and problem-solving. It can also be an important place to explore feelings and values and develop social skills. Long before the child feels comfortable sharing his/her favorite toy with other children, they may offer it to a doll. their first spontaneous "please" and "thank you" may slip out at an imaginary tea party.

Play is crucial for a child's social, emotional, physical, and cognitive growth. It's a child's way of learning about his/her body and the world, and they will use all five senses to do it, especially in the first year.

What is a child thinking during play?

What does this *object* feel like when I touch it?

What does this sound like when I squeeze it?

What will happen if I push this or pull that?

Should I crawl over there?

Should I pull myself up on this?

Exploration is the heart of play, and in the child's mind any experience matters, even hurling a bowl of cereal off the highchair tray. Development experts are fond of saying that play is the work of children.



✦✦✦ Key Point!

Infant care teachers should not focus on teaching specific lessons but on facilitating natural interests and urges for children to learn.



Bonding and Attachment

- Children need to attach to at least one caregiver
- Bonding helps child learn faster and make friends easier
- Gentle, responsive touch
- Bonding leads to trust and secure attachments



The main predictor of how well a child will do in school and in life is the strength of the relationship he or she has with you, the primary caretaker. This relationship impacts a child’s future mental, physical, social, and emotional health. It is not only founded on the quality of care and love, but on the nonverbal emotional communication between the child and adult known as the attachment bond. While it’s easiest to form this secure attachment bond with an infant, it can be formed at any time or at any age.

Growth and Development

The five stages of development are:

1. Infancy – birth to 12 months
2. Toddler – 12 months to 3 years
3. Preschool – 3 to 6 years
4. School age – 6 to 12 years
5. Adolescents – 13 to 18 years

During early childhood, a young children will “begin to discover that their behavior is their own.” That is, young children will begin to assert their independence, declaring “NO” and making other choices autonomously. A child’s most important relationships during this period of development

EXERCISE 3.1 EXPERIENCING THE ATTACHMENT BOND

Describe an instance where the “attachment bond” was evident either in your center, organization or in your personal life.



Growth and Development

Look at any class, and you'll see kids of the same age in all shapes and sizes. Some kids look tiny next to their peers, while others literally stand head and shoulders above their classmates. As easy as it is to make these comparisons and to draw conclusions about what you see, the reality is that kids grow at their own pace. Big, small, tall, short — there is a wide range of healthy shapes and sizes among children. Genetics, gender, nutrition, physical activity, health problems, environment, hormones, and lifestyle factors like nutrition and physical activity all influence a child's height and weight. And many of these factors can vary widely from family to family. A young child's physical growth first begins as muscles gain strength with use and children gradually develop coordination. The development of muscular control is the first step in this process.

- A child's physical increase in size or weight
- Growth proceeds from Head to foot (muscles develop from the head down)
- A child first lifts head, sits up, stands, walks; near to far (muscles develop from the body trunk outward)
- A child develops from simple to complex activities: Scoots body, wave arms, grab object, pick up object, being feed, holding the bottle, feeding self
- Growth is continuous and orderly: Both legs grow at the same time and rate

Development is the result of “transactions” between the child and his/her environment. Each transaction results in new learning which results in the development of skills and traits. The right frequency, quality and intensity of interactions between children and their environment will result in each child reaching his or her full potential.

Growth and development include the ability of a child to do things that are complex or difficult:

- Children grow and develop at different rates
- A child's development proceeds from general to specific
- Developmental stages are defined by milestones (i.e. walking, talking)



Developmental Milestones

Developmental milestones are similar to marks in the road that show us how far we have traveled. As children grow and develop they reach different milestones or complete different tasks. Milestones are guidelines to see if a child is on the right track or if they have developmental delays. Here an example of some developmental milestones:

1 Month	3 Months	7 Months
<ul style="list-style-type: none"> <input type="checkbox"/> Makes slight jerk movements <input type="checkbox"/> Brings his or her hands within the range of eyes and mouth <input type="checkbox"/> Turns his or hers head when called by a familiar sound and voice <input type="checkbox"/> Focuses on near by objects (8-12 inches away) <input type="checkbox"/> Responds to loud sounds 	<ul style="list-style-type: none"> <input type="checkbox"/> Notices their hands by two months <input type="checkbox"/> Smiles at the sound of a familiar voice by two months <input type="checkbox"/> Follows moving objects with her eyes by 2-3 months <input type="checkbox"/> Supports head when on stomach by 3 months <input type="checkbox"/> Babbles by 3-4 months <input type="checkbox"/> Attempts to imitate any of your sounds by 4 months <input type="checkbox"/> Attentive to new faces, and is frightened by them <input type="checkbox"/> Imitates some movements and facial expressions 	<ul style="list-style-type: none"> <input type="checkbox"/> Rolls on to back and front <input type="checkbox"/> Sits without support of the hands <input type="checkbox"/> Supports weight on legs <input type="checkbox"/> Responds to own name <input type="checkbox"/> Babbles by 3-4 months <input type="checkbox"/> Shows responses to "no" <input type="checkbox"/> Responds to sound by making sounds
15 Months	15-24 Months	2 years
<ul style="list-style-type: none"> <input type="checkbox"/> Sits up without assistance <input type="checkbox"/> Crawls <input type="checkbox"/> Pulls self up to stand <input type="checkbox"/> Walks by holding onto something <input type="checkbox"/> Responds to "no" <input type="checkbox"/> Uses simple gestures, such as shaking head for "no" <input type="checkbox"/> Says "dada" and "mama" <input type="checkbox"/> Tries to imitate words 	<ul style="list-style-type: none"> <input type="checkbox"/> says single words (15-18 months) <input type="checkbox"/> Uses simple phrases (18-24 months) <input type="checkbox"/> Plays pretend <input type="checkbox"/> Walks alone <input type="checkbox"/> Looks at objects when told to look 	<ul style="list-style-type: none"> <input type="checkbox"/> Begins to run <input type="checkbox"/> Walks up and down stairs holding onto support <input type="checkbox"/> Scribbles spontaneously <input type="checkbox"/> Recognizes names of familiar people, objects, and body parts <input type="checkbox"/> Follows simple instructions <input type="checkbox"/> Points at objects when told its name <input type="checkbox"/> Enthusiastic around other children

Milestones are general guidelines about the tasks that most children should be able to accomplish at certain age ranges. Children are different and some children will reach the milestones earlier or later within a given range.



Four Developmental Areas

Physical Development
Cognitive Development
Social Development
Emotional Development

NOTE: Social and emotional are closely related and are combined.





What is Physical Development?

How children’s bodies grow and move



A child will grow and change a lot during his/her life. From the moment s/he is conceived s/he begins the growing process. At each age, a child's body will be doing something new and continuing something old--growing, developing new teeth and other developments. This is all part of the physical development process. To ensure that a child grows to his/her full potential, you should make sure he/she is provided with a balanced diet of nutrients, iron, calcium and vitamins and get at least 60 minutes of physical exercise each day.

Physical Development

During the first three years, the physical growth and development of a child is more rapid than at any other time



The growth of a young child's physical abilities is truly amazing. Think of all the physical abilities a child must develop to adjust to the world; learning to see and recognize others, rolling over, holding a bottle or cup, crawling around objects and more. These are all complex physical tasks that require strength, coordination and perception. They also are developmental moments, those windows of time when parents or caregivers can see the ways in which a young child is growing and developing new skills and abilities.

EXERCISE 3.2 PHYSICAL DEVELOPMENT ACTIVITIES: GROSS & FINE MOTOR

Explain the types of activities for young children that entail physical development:

Gross Motor Skills

Involve large-muscle activities, such as moving one’s arms and legs

- Walk
- Run
- Hop
- Kick or throw a ball

One type of physical development is gross motor skills. What is a gross motor skill?

Gross motor skills which include large muscle activity.

Gross motor skills development milestone include:

- The development of posture-strength and balance, equilibrium, and cues from vision and hearing.
- Learning to walk- kicking, standing, walking

What are gross motor skills? (List 5-10)

Fine Motor Skills

Involve small muscle activities, that require eye-hand coordination such as:

- Beading
- Cutting
- Painting

Another area of physical development is in the area of fine motor skills. Fine motor skills involve finely tuned movements, using small muscles and general require eye-hand coordination. An experiment of infants concluded that infants do not have to see their own hands when reaching for an object. Because the infants could not see their hand or arm in the dark in the experiment—cues, not sight of limb, guided the early reaching of the 4 month old infants.

Examples: Buttoning a shirt, typing, or anything that requires finger dexterity demonstrates fine motor skills.

What are fine motor skills? (List 5-10)



What is Cognitive Development?

Cognition: process by which brain develops the abilities to learn and remember

- Thinking
- Learning
- Remembering
- Problem Solving
- Communication



The term **cognitive development** refers to the process of growth and change in intellectual/mental abilities such as thinking, reasoning and understanding. It includes the acquisition and consolidation of knowledge. Infants draw on social-emotional, language, motor, and perceptual experiences and abilities for cognitive development. Children are attuned to relationships between features of objects, actions, and the physical environment. But they are particularly attuned to people. Parents, family members, friends, teachers, and caregivers play a vital role in supporting the cognitive development of infants by providing the healthy interpersonal or social-emotional context in which cognitive development unfolds. Caring, responsive adults provide the base from which infants can fully engage in behaviors and interactions that promote learning.

EXERCISE 3.3 SUMMARIZE COGNITIVE DEVELOPMENT AND CAREGIVERS ROLE

How do parents, family, and caregivers play an important role in supporting an infants cognitive development?

What is Social-Emotional Development?

Social-emotional development includes the child's experience, expression, and management of emotions and the ability to establish positive and rewarding relationships with others. Infants experience, express, and perceive emotions before they fully understand them. In learning to recognize, label, manage, and communicate their emotions and to perceive and attempt to understand the emotions of others, children build skills that connect them with family, peers, teachers, and the community.



These growing capacities help young children to become competent in negotiating increasingly complex social interactions, to participate effectively in relationships and group activities, and to reap the benefits of social support crucial to healthy human development and functioning. Young children who exhibit healthy social, emotional, and behavioral adjustment are more likely to have good academic performance in elementary school. This recent research strengthens the view that early childhood programs support later positive learning outcomes in all domains by maintaining a focus on the promotion of healthy social emotional development.

Making friends. Showing anger in a healthy way. Figuring out conflicts peacefully. Taking care of someone who has been hurt. Waiting patiently. Following rules. Enjoying the company of others. All of these qualities, and more, describe the arc of healthy social-emotional development. Like any skill, young children develop these abilities in small steps over time.

EXERCISE 3.3 SUMMARIZE HOW A CHILD COMMUNICATES THEIR EMOTIONS

How does a child communicate their emotions to others?

(National Scientific Council on the Developing Child 2004; Raver 2002; Shonkoff 2004).



Section III

Child Development and Inclusion

Definition of Early Childhood Inclusion

Early Childhood Inclusion

Inclusion Strategies

Families and Inclusion

Child Development and Inclusion

Environments and programs are designed to facilitate access as some children will need additional individualized accommodations and supports to participate fully in play and learning activities with peers and adults. Adults promote participation and engagement of children with and without disabilities in inclusive settings in a variety of intentional ways. Depending on the individual needs and priorities of young children and families, implementing inclusion involves a range of approaches; from embedded, routines-based teaching to more explicit interventions; to scaffold learning and participation for all children. Inclusion involves a wide range of approaches and environments must be designed for inclusion, Individualized accommodations must be met, and promote participation in classroom activities.

Inclusion Strategies

- Establish prior knowledge.
- Pre-plan lessons with structured objectives, but also allow for inter/post planning.
- Proceed from the simple to the complex by using discrete task analysis, which breaks up the learning into its parts.
- Use a step-by-step approach, teaching in small bites, with much practice and repetition.
- Think about possible accommodations and modifications that might be needed such as using a digital recorder for notes, reducing the amount of spelling words, and having enrichment activities prepared.
- Incorporate sensory elements: visual, auditory, and kinesthetic
- Concentrate on individual children, not syndromes.
- Provide opportunities for success to build self-esteem.
- Give positives before negatives.
- Use modeling with both teachers and peers.
- Vary types of instruction and assessment, with multiple intelligences and cooperative learning.
- Establish a pleasant classroom environment that encourages students to ask questions and become actively involved in their learning.
- Effectively communicate and collaborate with families, students and colleagues, while smiling.

EXERCISE 4.1 DEVELOP A LESSON PLAN



Assignment

Develop a lesson plan that includes parental involvement and inclusion to use in the classroom or to share with your staff.

(See Lesson Plan Template in Appendixes)

(See Resources for activity ideas)



Definition of Inclusion

Joint Position Statement of the Division for Early Childhood (DEC) and the National Association for the Education of Young Children (NAEYC) (2009)

“Early childhood inclusion embodies the values, policies, and practices that support the right of every infant and young child and his or her family, regardless of ability, to participate in a broad range of activities and contexts as full members of families, communities, and society. The desired results of inclusive experiences for children with and without disabilities and their families include a sense of belonging and membership, positive social relationships and friendships, and development and learning to reach their full potential. The defining features of inclusion that can be used to identify high quality early childhood programs and services are access, participation, and supports.”

EXERCISE 4.2 DEFINE FEATURES OF INCLUSION

What does the Joint Statement (definition) support?

What is meant by participation?

What are the desired results?

The defining features of inclusion that can be used to identify high quality early childhood programs and services are _____, _____ and _____.”



Families and Inclusion

The following recommendations describe how the joint position statement can be used by families and professionals to shape practices and influence policies related to inclusion.

1. Create high expectations for every child, regardless of ability, to reach his or her full potential.
2. Develop a program philosophy on inclusion to ensure shared assumptions and beliefs about inclusion, and to identify quality inclusive practices.
3. Establish a system of services and supports for your center that reflects the needs of children with varying types of disabilities and learning characteristics, with inclusion as the driving principle and foundation for all of these services and supports.
4. As a team, revise your program and professional standards to incorporate key dimensions of high quality inclusion.
5. Evaluate professional development growth at your center: who would benefit from professional development on inclusion; what providers need to know and be able to do in inclusive settings; and what methods are needed to facilitate learning opportunities related to inclusion.
6. Review federal and state accountability systems to reflect both the need to increase the number of children with disabilities enrolled in inclusive programs as well as to improve the quality and outcomes of inclusion.

EXERCISE 4.3 DEVELOP AN ACTION PLAN



Assignment

Think about the recommendations provided to enhance inclusion in your center/organization. To start, select one of the recommendation and develop an action plan to determine how and when you will begin this process. (See Action Plan Template in Appendixes)



Review

- The content on this training is based on the work of some of psychology's best-known thinkers that have developed theories to help explore and explain different aspects of child development.
- While not all of these theories are fully accepted today, they all had an important influence on our understanding of child development.
- Today, contemporary psychologists often draw on a variety of theories and perspectives in order to understand how kids grow, behave, and think.
- Recognize the various levels of brain activity and identify windows of opportunity when infants thrive.
- Both brain architecture and developing abilities are built “from the bottom up,” with simple circuits and skills providing the scaffolding for more advanced circuits and skills over time.
- The most important relationships begin in the family but often also involve other adults who play important roles in the lives of young children, including providers of early care and education.
- Milestones are general guidelines about the tasks that most children should be able to accomplish at certain age ranges. Children are different and some children will reach the milestones earlier or later within a given range.
- Environments and programs are designed to facilitate access as some children will need additional individualized accommodations and supports to participate fully in play and learning activities with peers and adults.
- Inclusion involves a wide range of approaches and environments must be designed for inclusion, Individualized accommodations must be met, and promote participation in classroom activities.



Resources

Infant and Toddler ideas: <https://dcf.wisconsin.gov/youngstar/eci/activities-supports>

Inclusion Works: <https://www.cde.ca.gov/sp/cd/re/documents/inclusionworks.pdf>

Inclusive Schools Network: <http://inclusiveschools.org/category/resources/early-childhood/>



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Glossary of Terms

Access – means providing a wide range of activities and environments for every child by removing physical barriers and offering multiple ways to promote learning and development.

Bandura, Albert -Bandura is known as the originator of social learning theory (renamed the social cognitive theory) and the theoretical construct of self-efficacy, and is also responsible for the influential psychologist of all time.

Child Development -entails the biological, psychological and emotional changes that occur in human beings between birth and the end of adolescence, as the individual progresses from dependency to increasing autonomy. It is a continuous process with a predictable sequence, yet having a unique course for every child. It does not progress at the same rate and each stage is affected by the preceding developmental experiences.

Erickson, Eric - Erik Erikson (1950, 1963) proposed a psychoanalytic theory of psychosocial development comprising eight stages from infancy to adulthood. During each stage, the person experiences a psychosocial crisis which could have a positive or negative outcome for personality development.

Gesell, Arnold - The Maturational Theory of child development was introduced in 1925 by Dr. Arnold Gesell, an American educator, pediatrician and clinical psychologist whose studies focused on "the course, the pattern and the rate of maturational growth in normal and exceptional children."

Participation – means using a range of instructional approaches to promote engagement in play and learning activities, and a sense of belonging for every child.

Piaget, Jean - Piaget's (1936) theory of cognitive development explains how a child constructs a mental model of the world. He disagreed with the idea that intelligence was a fixed trait, and regarded cognitive development as a process which occurs due to biological maturation and interaction with the environment.

Skinner, B.F. - Skinner believed that we do have such a thing as a mind, but that it is simply more productive to study observable behavior rather than internal mental events.

Synaptic Density - Synaptic density has been directly visualized in living human brains for the first time in new work that demonstrates the potential of a novel PET tracer.

Supports – refer to broader aspects

of the system such as professional development, incentives for inclusion, and opportunities for communication and collaboration among families and professionals to assure high quality inclusion.

Vygotsky, Lev - The work of Lev Vygotsky (1934) has become the foundation of much research and theory in cognitive development over the past several decades, particularly of what has become known as Social Development Theory.



Appendixes

Exercise 1.1 Child Development Theorists Template

Exercise 3.1 Lesson Plan Template

Exercise 3.3 Action Plan Template



Exercise 1.1 Child Development Theorists Template

Select a theorist from the video and summarize in 75-100 words the key points and how any of these components are evident in the workplace.



Exercise 3.1 Lesson Plan Template

Develop a lesson plan that includes parental involvement and inclusion to use in the classroom or to share with your staff.

Title of Lesson: Objective/s: 1) 2) 3) Age group: <input type="checkbox"/> Infant <input type="checkbox"/> Toddler <input type="checkbox"/> Preschool	
Parental Involvement	Inclusion
Activity #1	Activity #1
Activity #2	Activity #2
Activity #3	Activity #3
Learning Outcomes:	



Exercise 3.3 Action Plan Template

Action Plan

Training Title:

Prepared by:

Date/Period:

Objectives	Tasks	Stakeholders	Timeframe

Reviewed by: _____

Date/Period: _____



**Thank you for choosing
Child Care Training Consultants, LLC.,
for your CDA Training Needs!**

Learning Assessment

Read the material provided, take the 5-10 quiz questions and
complete the training evaluation at the end of the course.

Participants must receive 100% on individual courses to obtain a certificate of completion.

Questions?

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