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ABSTRACT

Emphasizing brain research, this guide is designed to help trainers teach caregivers to provide responsive care to infants/toddlers and to understand why responsive care is important. The training is targeted for anyone in a caregiving role, especially child care providers and home care providers. The guide is organized in three sections. Section 1 contains an overview of the training and guidelines for five lessons, designed to be presented in 1 or 2 days: (1) "Training Welcome and Overview" introduces the caregiver's role in providing important influences for brain development; (2) "What Is Responsive Care, and Why Should I Provide It?" focuses on critical windows for social attachments, responsive care, planned times and daily routines, the importance of assigning a primary caregiver for each child, hurdles and helps in providing responsive care, and highlights of brain development; (3) "How Can I Provide Responsive Care?" covers individual needs, scheduling, and applying responsive care to on-the-job situations; (4) "Does Our Caregiving Environment Promote Responsive Care?" focuses on the effect of the environment on children, and assessing the caregiving environment; and (5) "Training Conclusion" includes an activity to examine ways to take what was learned back to the job. The section overview includes information on trainer requirements, general materials needed, specific training tips, and making adjustments. Each lesson delineates steps for preparation and materials specific to the lesson, and includes a lesson overview as well as the entire script for the lesson. Section 2 contains participant materials, including resources and handouts. Section 3 contains transparencies for use in the training. (Contains 11 references.) (KB)

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TRAINER'S GUIDE

ED 459 907

Building Babies' Brains

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A Training for Infant/Toddler Caregiver

TRAINER'S GUIDE

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The REGIONAL EDUCATIONAL LABORATORY at SERVE

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Building Babies' Brains

A Training for Infant/Toddler Caregivers

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Overview of Training

Training Objectives

This training is designed to help learners provide responsive care to children and to understand why responsive care is important. An emphasis throughout this training is on the brain research, which has driven the need for responsive care in caregiver settings. We have defined responsive care as being attentive to the individual needs of each child; responding in a way that promotes developmental learning in at least one area; using the Six T's every day (that is, tuning in, teaching, time, talk, touch, and trust). By the end of training, participants should be able to

- Choose responsive care over unresponsive care in any given caregiving situation.
- Identify appropriate responsive care activities to use with children on the job.
- Determine how to create a caregiving environment that promotes responsive care.

Target Audience

This training is intended for anyone in a caregiving role. This includes child care providers, as well as home care providers.

Organization of the Training

Lesson One of this training is intended to welcome participants and provide an overview of the training. Participants are introduced through an ice breaker, and they get a chance to preview the key concepts covered in this training in the first activity.

Lesson Two focuses on defining responsive care, sharing the latest brain research that drives the need for responsive care, and discussing the long-term outcomes of responsive care. In other words, emphasis is placed on *what* responsive care is and *why* we should provide it. This lesson is intended to affect participants' attitudes toward providing responsive care, even in situations when it is difficult to provide in the caregiving setting.

Lesson Three focuses on how to determine the responsive care activities that are appropriate to use. Responsive care and the brain research are applied to on-the-job situations.

Lesson Four talks about creating a caregiving environment that promotes responsive care. Participants assess their own environments and discuss how to make changes.

Lesson Five concludes the training by asking participants to share with the class what they will do differently on the job as a result of this training.

Suggested Agenda

The training may be completed in a single day, as indicated by the agenda below. Alternatively, the training may be divided across two days if that is more convenient for participants.

8:30 – 9:30	Lesson 1: Training Welcome and Overview
9:30 – 11:30	Lesson 2: What is Responsive Care, and Why Should I Provide It?

11:30 - 12:30	Lunch
12:30 - 1:30	Lesson 3: How Can I Provide Responsive Care?
1:30 - 2:30	Lesson 4: Does Our Caregiving Environment Promote Responsive Care?
2:30 - 3:00	Lesson 5: Training Conclusion

Trainer's Guide Layout

For each lesson, the *Trainer's Guide* includes

- A Materials list and a Preparation list
- A "Training at a Glance" table, which explains what is covered in the lesson, how it is to be facilitated, materials used per topic, and time per topic
- Trainer's instructions and script

The *Trainer's Guide* also includes a set of participant handouts and the overhead transparencies to aid in the trainer's preparation.

Trainer's Instructions and Script

The *Trainer's Guide* provides complete instructions for how the trainer should facilitate the lesson. For example, it suggests the time each portion of training should take, tells the trainer when to use transparencies, and tells when to refer to handouts.

- Time is indicated at the beginning of each topic in a gray bar. For example:

  10 minutes

  This indicator should serve as a guideline for completing that section.
- Transparencies are indicated by the letter "T," the lesson number, and the transparency number. For example, T-1.3 means the third transparency in Lesson One.
- Handouts are indicated by the letter "H," the lesson number, and the handout number. For example, H-1.5 means the fifth handout in Lesson One.
- Script is indicated by a dark bar to the left of the content as shown below. The script does not need to be verbatim unless the *Trainer's Guide* indicates, but all scripted points should be conveyed.

> This is an example of "script." Script is information the trainer should present to the class.

Materials

Specific materials needed for each lesson are listed in the "Materials" checklist and the "Training at a Glance" sections at the front of each lesson. In general, the following supplies will be needed for each lesson in addition to those listed in each lesson's front matter:

- Handouts and transparencies
- Sign-in sheet
- Flipchart paper, stand, and markers
- Masking tape
- Overhead projector and screen
- Pencils or pens
- Post-It-Notes

Requirements of the Trainer

The trainer of this training must have a basic understanding of early childhood care and the demands of the target audience's job. Some prior knowledge about the brain research covered in this training is recommended (see bibliography for additional readings).

In addition, trainers must be completely familiar with this entire program before training. It is recommended that trainers prepare for this program by reading and rehearsing the training at least three times before training.

Organizing a Training Lesson

- Select a convenient location.
- Make sure that parking is adequate and convenient.
- Ensure that the size of the room is appropriate for the number of participants.
- Seating is best arranged to facilitate large-group discussion. Also, consider the comfort of the chairs available.
- Select a site conducive to the use of overhead transparencies.
- Plan to have some flexibility regarding when the training is offered to make times more convenient for attendees.
- If possible, provide childcare. This will make the training more accessible for lessons offered in the evenings or on weekends.
- When sending out information on the training, it is a good idea to include an information form to be returned in advance of training. This will provide the trainer with information about participants' experiences and expectations. The trainer should use this information to add appropriate examples and anecdotes to the script.
- Provide a map and directions to the training site.
- At the training site, post signs and directions to the training room. Make sure a receptionist knows where the training is being held, starting times, and ending times.
- Prepare the *Participant's Guides*. Place all participant materials into folders, including handouts and note pages.
- Arrange for coffee, water, and other refreshments to be available on the day of training.

Trainer Preparation

- First, read the Overview and Suggested Agenda. This will provide a good introduction to the material.
- Next, read through the entire *Trainer's Guide* along with all participant materials. Read all directions to activities thoroughly and understand the key points to be made and exactly how each activity should be carried out.
- Highlight key points in the script. Make notes in the margins, including additional questions to ask participants, times to start and end activities, and anecdotes you may want to use.
- Rehearse the training lesson by lesson. It is recommended that trainers prepare for this program by reading and rehearsing the training several times before training.
- In general, know each topic, focus on its purpose, feel free to share your own experiences, and be prepared to use all materials as intended.
- Be well enough prepared for training that you do not have to hold the *Trainer's Guide* or read it word for word.

Specific Tips During Training

Tone

Create an empathetic, comfortable tone in training. Ensure participants' personal comfort (for example, temperature, seating, refreshments, etc.), accept everyone's ideas, encourage cooperation, empathize with participants' on-the-job and training challenges, appreciate the expertise of others, and be an understanding listener.

Trainer Style

Infuse humor wherever possible, exhibit flexibility, use an appropriate level of language for the audience, and draw on participants' experiences. To sustain attention,

use "vocal variety" by changing pitches in your voice. Also, use body movement: use a variety of gestures and move around from one area to another throughout the day. Do not stand in one position throughout training.

Facilitating Discussions

- When asking the questions, present the question, then wait for volunteers to answer. If no one answers, ask the question in a slightly different way. If still no one volunteers, call on a participant. Distribute questions fairly among participants throughout training.
- Allow ample time for participants to answer.
- Commend any participant's attempts at responding.

Summarizing Discussions

- Recognize when to bring discussion to a close.
- Help the class to draw conclusions, and solicit participant summaries when appropriate.
- Provide a link from the discussion to the lesson objectives.
- Suggest ways to apply learning to the job.
- Reflect on what was learned, and provide transition to the next topic.

Responding to Questions

During training, participants may raise questions to the trainer. Remember these points when responding:

- Plan answers for questions you think participants are likely to ask.
- Be honest. If you don't know the answer to a question, say so. Offer to find out the answer.
- Be open to challenges. Answer questions in a positive manner even when participants do not understand or agree with you.
- Use participants' words. Avoid reinterpreting their questions.
- Answer the question. Do not stray from the subject.

General Notes for Conducting Training

- Start on time
- End on time
- Supply refreshments
- Stay focused and stick to the agenda.
- Make sure all voices are heard. Watch for quiet members of the class and choose them to give opinions, discuss key points, and give answers to exercises.
- Define any technical terms you use. Avoid the use of jargon.
- Make minor adjustments as needed to the training without changing the training design.

Making Adjustments

There is plenty of latitude for personal style, paraphrasing, and making minor adjustments depending on the needs of a particular class. The key, however, is to adjust without changing the objectives or the design of the training. Here's how to strike that balance:

Train the core content as is, such as technical information, definitions, tasks, or steps.

- Facilitate practice exercises as suggested with the following exceptions: (1) You may pair participants up or divide them into groups other than as suggested in the *Trainer's Guide*, depending on the group size and needs of the class. (2) On exercises involving written questions, you may cut down on the time needed by dividing up the questions among the groups. Ask part of the class to answer some of the questions and the other part of the class to answer the remaining questions.
- Use personal examples and experiences that relate to the subject matter.
- Use questioning techniques to engage the participants.

- Personalize flipcharts using graphics, color, or drawings.
- Conduct short reviews based on the needs of the class.
- Paraphrase the script into your own words—without changing the content or the objectives, unless the script indicates to read a passage verbatim. Using your own words will help you to establish and maintain your credibility.

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LESSON 1

Training Welcome and Overview

1 Hour

Lesson One Checklist

Preparation

- ❑ Prepare a flipchart containing the agenda and post in clear view throughout the training.
- ❑ Purchase toys that can easily be compared to the brain for use in Activity 1.1.
- ❑ Fill a box with all the toys.
- ❑ Prepare a flipchart labeled, "Introduction Topics" that lists the following:
  - Name
  - Caregiving role
  - This (name of toy) is like a brain because _____ and _____.
- ❑ Make enough copies of H-1.1 and H-1.2 for everyone in class.

Materials

- ❑ T-1.1 through 1.2
- ❑ H-1.1, *Suggested Agenda*
- ❑ H-1.2, *A Letter from Jamey*
- ❑ Masking tape
- ❑ Large box
- ❑ Toys, such as marbles, balls, silly putty, books, connect the dots, puzzles, Rubik's cubes, magnets, sponges, slinkys, Legos, blocks, a barrel of monkeys, and any other toy for which a similarity might be drawn to the human brain and its characteristics
- ❑ Flipchart and stand
- ❑ Markers (1 set)
- ❑ Overhead projector and screen

What and How	Materials	Time
Introduction *Opening* Welcome and introduce the group. Suggested Agenda and Lesson Overviews Go over agenda and summarize each lesson. *Participant's Guide* Go over contents of *Participant's Guide* and resource material. *Housekeeping* Go over items such as bathroom locations, refreshments, and so on.	• T-1.1 • H-1.1, *Suggested Agenda* • Prepared agenda flipchart	10 minutes
Activity 1.1 **Icebreaker** The purpose of this activity is to introduce participants and set a tone of fun. Participants choose a toy from a box and work with a partner to draw an analogy to the brain. Then, each person stands up to introduce him or herself to the class and states one way their toy is like the brain.	• Large box • Toys • Flipchart • Markers	30 minutes

What and How	Materials	Time
Activity 1.2 **A Letter from Jamey** This activity begins focusing participants' attention on today's topics and gives them a sense that their work is appreciated by children. Participants think of a student they've given good care to and read a letter supposedly written by this former student (that is, "Jamey"). The letter talks about the student's successes as an adult. Participants discuss what they did to support learning other than what was mentioned in the letter. Emphasize participants' important role in shaping children's futures.	H-1.2, *A Letter from Jamey*	15 minutes
Closing Show participants an overhead depicting the input to and output from the brain. Input includes genes plus experience, while output includes our capabilities and well-being. Draw participants' attention to the part they can control: their care to children (input).	T-1.2	5 minutes
		Total: 1 Hour

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10 minutes

Introduction

Training Welcome and Overview

Opening

Display T-1.1, *LESSON 1: Welcome and Overview.*

Welcome the group and introduce yourself.

- This training is entitled, *Building Babies' Brains: A Training for Infant/ Toddler Caregivers*. What you will learn today is how to help build babies' brains every time you interact.
- The reason we feel this training is so important at this time is because research has recently confirmed the effects of early childhood experiences on the brain.
- In this training, you will learn *how* to interact with children and *why* to interact with them based on the brain research.
- While most of our time will be spent on how to apply the brain research when we interact with children, we also will spend a little bit of time on the brain research; however, we won't get into too much detail. We'd just like to summarize the research briefly so that you will know why your care of children is so important.

Suggested Agenda and Lesson Overviews

Refer participants to H-1.1, *Suggested Agenda.* Prepare a flipchart containing the agenda, and post it in clear view throughout the training.

Today, our agenda looks like this:

8:30 - 9:30	Lesson 1: Training Welcome and Overview
9:30 - 11:30	Lesson 2: What is Responsive Care, and Why Should I Provide It?
11:30 - 12:30	Lunch
12:30 - 1:30	Lesson 3: How Can I Provide Responsive Care?
1:30 - 2:30	Lesson 4: Does Our Caregiving Environment Promote Responsive Care?
2:30 - 3:00	Lesson 5: Training Conclusion

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FULL SCRIPT - LESSON 1

As the agenda is reviewed, give the following brief module descriptions:

Lesson 1 is the introduction.
Lesson 2 focuses on defining the type of care children need and briefly summarizes the brain research.
Lesson 3 gets more specific and suggests different activities that can help children develop fully.
Lesson 4 addresses how to set up our child care centers so that we are able to provide the care children need.
Lesson 5 will ask that you recall everything you've learned from the training and make some commitments for what you'll do differently back on the job.

Participant's Guide

Go over the contents of the *Participant's Guide* (note pages, handouts, other) and Resource Materials.

Housekeeping

Go over any "housekeeping" items, such as bathroom locations, refreshments, and beepers. Encourage an atmosphere of fun and learning today (for example, the only dumb question is the one that is not asked!).

30 minutes

Activity 1.1

Icebreaker

Materials

Large box

Toys for which a similarity might be drawn to the human brain and its characteristics, such as marbles, softballs, play dough, board books, puzzles, Rubik's cubes, sponges, balloons, Etch-A-Sketch, slinkys, Legos, blocks, a barrel of monkeys, or connect-the-dots books

Flipchart, markers

Preparation

Note: When purchasing toys for this activity, ensure a similarity can be drawn between them and the brain. If you can't find one, participants won't be able to either.

Fill the box with all the toys.

Prepare a flipchart labeled, "Introduction Topics," and write the following:

Name

Caregiving role

This name of toy is like a brain because _____ and _____.

Key Points

This activity is intended for participants to introduce themselves and set a tone of fun.

Directions

1. Tell participants that you'd like them to introduce themselves.
2. Pass around a box of toys. Each person should work with a partner sitting next to them and choose a toy out of the box.
3. The partners should then complete the statement on the flipchart: This name of toy is like a brain because _____ and _____.
4. After a few minutes, ask each participant to stand up, introduce themselves (including name and caregiving role), and give one way the toy they chose is like a brain.
5. Conclude by saying that the similarities they have come up with will help get their own brains working in the right direction today.

Suggested Responses

- This board book is like a brain because it is filled with images and pictures.
- Play dough is like a brain because it is soft and can be shaped and molded.
- This puzzle is like a brain because it can connect many small pieces of information together to create and make sense of a bigger picture.
- This sponge is like a brain because as it fills, it expands and grows larger.

15 minutes

Activity 1.2

A Letter from Jamey

Materials

H-1.2, *A Letter from Jamey*

Preparation

Make enough copies of H-1.2 for everyone in class.

Key Points

- This letter helps participants to begin focusing their attention on the main concepts that we will cover today, such as how care affects the three areas of development, brain foundations, and children's futures; the importance of partnerships with parents; and the meaning of responsiveness.
- This letter is also intended to provide participants with a glimpse of the gratitude children may feel for their care – even though that gratitude is not usually expressed.
- Finally, this activity should reinforce how important these participants are because of their role in caring for children.

Directions

1. Tell participants that this activity will help shape their ideas about the kinds of care young children need to promote their development.
2. This activity requires that we pretend we are now in the year 2025 and have gone out to our mailboxes to find a letter from a child previously in our care.
3. While Handout 1.2 is being distributed, ask if anyone has ever had a child come back to thank them years later. Explain that they will also get that thank you for all their hard work in this activity.
4. Ask participants to think of the first name of a child to whom they have given especially good child care throughout their careers. Tell them that we will call this child "Jamey" for the purposes of this activity, even though the actual child probably had a different name.
5. Ask participants to read the letter. Refer to the part of the letter where Jamey says the caregiver helped him/her learn to play nicely, speak with different words, kick a ball, and do many other things. Ask several volunteers to

name one or two of the other things participants helped Jamey—or the real person they actually had in mind—to learn.

6. Record responses.
7. Explain that this letter should reinforce how important these participants are because of their role with children. Conclude by commenting that this room is full of people who have done many wonderful things for children and that, as the letter shows, their impact will be far-reaching in the lives of children. Admit that they may not ever receive a letter like this again, but their impact will still exist.
8. Debrief by thanking participants and asking that everyone travel back in time to the current year.

5 minutes

Closing

Display T-1.2, *The Brain: What Goes In and What Comes Out.*

Refer to each section on the transparency as it is referenced below.

- As this transparency shows, there are many things that "go into" and influence a child's brain: characteristics that are inherited from our parents (we call this "heredity"), mothers' prenatal experiences, the care and experiences you provide for children, and all of the other care and experiences the child will have throughout life.
- All of this input will help the brain to grow.
- The results or what "comes out of" the brain's growth is a special person with unique capabilities, achievements, and a sense of well-being. The person is unique because he or she has a special set of characteristics that were inherited from the person's parents and formed through life experiences.
- You may not be able to control what influences the child's brain in terms of what the child has inherited or what other experiences the child has had throughout his or her life, but you *can* control your care and the experiences you provide for the child.
- That is what this training is all about: providing the best care possible to children during these critical early years.
- In *Lesson Two*, we will define this care and talk about what happens in the child's brain each time you interact.

FULL SCRIPT - LESSON 1

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Notes...

LESSON 2

What Is Responsive Care, and Why Should I Provide It?

2 Hours

Lesson Two Checklist

Preparation

- ❑ Prepare a flipchart, *The Six T's of Responsive Care,* which lists the following and post in clear view of all participants:
  - Tuning in
  - Teaching
  - Time
  - Talk
  - Touch
  - Trust
- ❑ Cue the videotape, "I Am Your Child" to the beginning of the tape so that the VCR only needs to be powered on (Activity 2.2).
- ❑ Make enough copies of H-2.1 and H-2.2 for each participant in class.
- ❑ Make one copy of H-2.3, and cut the copy along the dotted lines to make cards for participants (Activity 2.3).

Materials

- ❑ T-2.1 through 2.29
- ❑ H-2.1, *Responsive Care Example*
- ❑ H-2.2, *Results of Your Care*
- ❑ H-2.3, *Neural Connections*
- ❑ Flipchart
- ❑ Masking tape
- ❑ Markers (at least eight different colors)
- ❑ Videotape, "I Am Your Child"
- ❑ Ball of yarn
- ❑ Scissors
- ❑ VCR/Monitor
- ❑ Overhead projector and screen

What and How	Materials	Time
Introduction **Opening** Overview the lesson by saying that this lesson discusses the type of care we should provide to children and why we should provide it. Explain that the main focus will be on the type of care to provide, but a little time will also be spent on summarizing the brain research and the effects of early care on brain development. **Goals for the Lesson** Review the objectives.	T-2.1 through 2.2	5 minutes
Group Discussion **How Children Develop** **Stages of Development** Clarify the age ranges of the children who are typically cared for by participants. **Three Areas of Development** Overview the three areas of development. Participants may already have some understanding of these three areas, so this overview is intended to ensure that everyone defines these concepts in the same way. After explaining each briefly, ask how Jamey (from *Lesson One*) developed in that particular area.	T-2.3 through 2.7	10 minutes

What and How	Materials	Time
Short Lecture **Critical Windows** **How Foundations Are Set** Discuss the meaning of critical windows. Emphasize and use as an example the critical window for social attachments. Ask participants to relate the Jamey example to critical windows. **How Learning Continues** Emphasize that risk does not mean destiny. Learning continues throughout life, and the brain can change; it just does not change as rapidly as it can during the first several years of life.	T-2.8 through 2.9	5 minutes
Lecture **Review of Key Points** Review the key points covered so far (on how children develop and critical windows) or ask participants to summarize.		1 minute

What and How	Materials	Time
Lecture and Discussion **Responsive Care** **Definition of Responsive Care** Review the transparency, *The Brain: What Goes In and What Comes Out,* from Lesson One. Tell participants that you will now discuss the first part of the visual (i.e., what goes in). Give a scripted example of responsive care. Point out that this is an example of the responsive care they should provide to children. Give a definition of responsive care, including detail on the Six T's. Ask how the Six T's relate to the brain research. Discuss how the earlier scripted example fits the definition of responsive care. **Planned Times vs. Daily Routines** Draw a distinction between how responsive care can be given at planned times or during daily routines. Emphasize that infants receive more interaction and responsive care during daily routines whereas toddlers receive more during planned activities. As needed, give examples of responsive care activities done during planned times vs. daily routines. Emphasize that sometimes it's what you don't do that is responsive and give examples. **Primary Caregivers** Suggest that one way to give responsive care is to assign a primary caregiver. Go over what this means and give examples. Emphasize that it does not mean "sole" caregiver.	• T-2.10 through 2.15 • H-2.1, *Responsive Care Example* 29	15 minutes

What and How	Materials	Time
Definition of Unresponsive Care Ask participants to define unresponsive care. Ask for examples. Emphasize that some care may seem responsive, but is not because it is not tuned in and does not teach. Give examples. **Your Goal** Explain that their goal should be to give responsive care during each interaction.		
Group Discussion **Hurdles** Dovetail off the last statement about the participants' goal, and ask participants if they feel it is possible to achieve the goal. If not, ask for reasons why not (i.e., hurdles). Record responses onto separate flipcharts and tape across the front of the room in preparation for the next activity.	T-2.15	5 minutes
Activity 2.1 **Hurdles and Helps** Participants work in groups to generate ideas for overcoming the hurdles recorded onto the flipcharts in the last discussion. Each group stands in front of one of the flipcharts and lists as many solutions to the hurdle as they can. After a few minutes, the trainer signals them to move clockwise ("carousel" style) to the next flipchart to add any other solutions they can think of to that flipchart. The activity continues in this manner until all groups have tried to	• T-2.16 through 2.17 • H2.2, *Hurdles and Helps* 30	20 minutes

What and How	Materials	Time
contribute solutions for overcoming each hurdle.. Transition by saying that now they will apply the solutions they came up with to on-the-job situations. Show two transparencies with scenarios involving hurdles. Ask participants to identify the hurdles in the scenarios and use the ideas they've just recorded (or add new ones) to describe how they might help the hurdles.		
Lecture **Review of Key Points** Review the key points covered so far (on responsive care, unresponsive care, goals, and hurdles), or ask participants to summarize.		1 minute
Group Discussion **Brain Development** Transition by showing the transparency, *The Brain: What Goes In and What Comes Out* again. Focus now on the center portion: what happens in the brain when we give responsive care. **Heredity** Explain that we are born with a basic structure of brain cell connections that were genetically inherited from our parents. **What's a Neuron?** Go over the main parts of a neuron using a visual (i.e., cell body, terminal, axon,	T-2.18 through 2.27	15 minutes

What and How	Materials	Time
dendrites, neurotransmitters, synapses). Demonstrate with one or two analogies: 1) compare a neuron and its parts to an arm, hand, and fingers; and/or 2) compare neural communication to two people shouting across a river. **How Neural Connections Form** Explain that although we are born with a basic brain structure, each experience changes these connections and adds new ones. **How Neural Connections Strengthen** Discuss the "use it or lose it" principles to explain how those connections that are used are strengthened and those that are not used die off. Give an example. **New Technologies** Highlight the various technologies which have enabled us to illustrate how the brain grows given different types of care (i.e., PET scans, CAT scans, MRIs). Show two PET scans and discuss how they show activity in different regions and how the brain grows and changes. **Effects of Abuse and Neglect** Show a PET scan of a healthy child vs. a neglected child. Point out the differences in brain activity. Explain that the same effects are often seen even in less-traumatic situations where parents are stressed or depressed. Emphasize again that risk does	32	

What and How	Materials	Time
not mean destiny. The brain can change throughout life, just not as quickly as in early childhood. **Implications for Caregivers** Conclude for participants that this means the more they provide responsive care, the more healthy neural connections will form in children's brains. Emphasize the importance of their role: they help to build those healthy neural connections.		
Group Discussion **Results of Your Care** Refer participants to H-2.2, *Results of Your Care,* and explain the contents of the two lists. Give participants an example of how one of the results on each list links to the brain research. Ask several participants to do the same (i.e., choose results on each list and explain to the class how the outcome might be explained by the brain research).	• T-2.28 • H-2.2, *Results of Your Care*	5 minutes
Activity 2.2 **"I Am Your Child" Video** Show the Introduction, first segment, and second segment of the video, "I Am Your Child," which recaps many of the ideas covered so far in this lesson. Discuss key points as they come up in the video. If time permits, show the remainder of the video.	Videotape, "I Am Your Child" 33	20 minutes

TRAINING AT A GLANCE - LESSON 2

What and How	Materials	Time
Activity 2.3 **Neural Connections** This will help participants process the information just presented. Participants stand in a circle and ask each other the multiple-choice questions on their cards. One person should begin while holding a ball of yarn. Each time someone answers correctly, the person holding the ball of yarn should wrap a piece of yarn around themselves and toss it to the person who answered correctly. At the end, help participants to conclude that they've just formed a representative set of neural connections with the yarn and a real set of connections in their own brains by learning this material.	• Ball of yarn • Scissors • H-2.3, *Neural Connections*	20 minutes
Closing Review the lesson objectives and ask participants if they feel they've achieved each of them. Refer participants to the extra Resource Material and transition to the next lesson.	T-2.29	2 minutes
		Total: 2 Hours

34

10 minutes

Group Discussion

How Children Develop

Stages of Development

Script

- First, let's clarify the age ranges of the children who are typically in your care. What is the typical age range of infants? What is the age range of young toddlers? What is the age range of older toddlers?

Suggested Responses:

- Infants – Birth to 12 months
- Young Toddlers – 12 months to 24 months
- Older Toddlers – 24 months to 36 months

Display T- 2.3, *Stages of Development.*

Script

- There are differing opinions about when one age group ends and another begins. For the purposes of this training, we'll use the age ranges on the transparency.

Three Areas of Development

Display T-2.4, *Areas of Development.*

Script

- Next, before getting into the brain research, let's talk about three ways children develop. Then we'll see what actually happens in the brain as they develop.
- The three areas of development we will focus on are social/emotional, thinking/communicating, and physical.
- Complex activities, like soccer or writing a sentimental letter, actually require a combination of all three areas of development. But, let's address them now one by one so that everyone understands them the same way.

FULL SCRIPT - LESSON 2

FULL SCRIPT - LESSON 2

Social/Emotional Development

Display T-2.5, *Social/Emotional.*

Script

- Social/emotional development refers to a child's growing ability to relate to others, become independent, and feel and express feelings.
- Some signs of children's social/emotional development are how they resolve conflict and handle anger, play with others, respect others' rights and follow rules, decide to do things themselves and then do them, separate from their families, and trust other adults.

What were some of the examples of social/emotional development illustrated in the letter written by Jamey in Lesson One?

Suggested Responses:

- As a child, Jamey didn't play nicely with others. Now Jamey
  - Feels grateful and can express gratitude.
  - Works well and has fun with others.
  - Trusts (depends on) others.
- Jamey grew to be
  - Passionate about career and hobby.
  - Happy and optimistic.
- Jamey is a teacher and heading up the school newspaper, which requires social development.
- Jamey is part of a soccer team, which requires social development.
- Jamey is self-reflective about emotions.

Thinking/Communicating

Display T-2.6, *Thinking/Communicating.*

Script

- Thinking/communicating refers to children's increasing ability to perceive, think, learn, and then communicate what they have learned to those around them.
- Some signs of children's thinking/communicating development are how they are curious about objects and events, look for causes and effects, organize objects, take on pretend roles and make believe with objects, understand and use language, use books, and scribble.

What were some of the examples of thinking/communicating that were illustrated in the letter written by Jamey in Lesson One?

Suggested Responses:

- As a child, Jamey didn't know words. Now, Jamey
  - Writes letters.
  - Speaks well.
  - Is a teacher.
- Jamey works on the school newspaper.
- Jamey plays on a soccer team, which requires thinking of strategies and communicating with teammates.

Physical

Display T-2.7, *Physical*.

Script

- Physical refers to changes that occur in a child's body, such as size, muscle control, and coordination.
- When you hear the term "gross motor skills," it refers to use of the larger muscles. Some signs of children's gross physical development are how they balance, climb, run, jump, hop, throw, and catch. These use the larger muscles.
- When you hear the term "fine motor skills," it refers to use of the smaller muscles. Some signs of children's fine motor physical development are how they control hand strength, use hand-eye coordination, cut with scissors. These use the smaller muscles.

What were some of the examples of physical development illustrated in the letter written by Jamey in Lesson One?

Suggested Responses:

- As a child, Jamey could not kick a ball. Now, Jamey plays soccer.
- Writing letters requires fine motor skills.
- Doing any type of job, such as being a teacher or running a newspaper, requires physical capabilities.

10 minutes

Short Lecture

Critical Windows

How Foundations Are Set

Display T-2.8, *Critical Windows.*

Script

- Now, let's turn our attention to the brain research I started talking about earlier.
- The latest research tells us that there are times in our lives when our brains *allow more learning* in each of the three developmental areas and actually *form more* connections than at any other times of our lives.
- These times are called the brain's "critical windows of opportunity" because it is during these times we should encourage the most learning and take advantage of the brain's special growth potential.
- How the brain becomes structured during these times becomes its basic structure for the rest of our lives.

Refer back to Jamey from Lesson One.

Script

Why do you think responsive care to Jamey before the age of three helped him/her to become a teacher and a soccer player as an adult?

Suggested Responses: Responsive care from his caregiver, helped Jamey's brain develop in the three areas of development during its critical windows for learning.

Explain that different windows open at different times for different areas of development.

Script

- Overall, the brain is most active between the ages of birth and twelve years, but the brain is especially active during the ages of birth to three.

FULL SCRIPT - LESSON 2

That is why the first three years are so important to the types of development we've been talking about. Many of the brain's critical windows for social/ emotional, thinking/communicating, and physical development are open during the first three years of life.

- During these first few years of life, different parts of the brain become active "construction sites" at different times.
- For example, the most critical window for developing the ability to attach to others begins between six and eight months. This is when children are developing attachment and learning to trust those who care for them. They are realizing that their caregivers are people who are available and who provide comfort and security when needed. This is normal development in children. During this social attachment window, we can encourage these social attachments in addition to helping them learn the next important ability: to trust other adults as well. Trust of others is something children at this age are still working on, but it is very important because trust is the basis for all future relationships.

Emphasize the point below that adequate early attachment has been linked to better social behavior, while the lack of early attachment has been linked to poor social behavior, including conduct problems, impulsiveness, and violence.

Script

In fact, research has concluded that children's quality of care and the strength of their attachments to caregivers during their critical windows for attachment affect their later abilities to empathize with others, control their emotions, and control their behavior.

Refer back to Jamey from Lesson One again.

Script

Why do you think responsive care to Jamey helped Jamey to become socially and emotionally well-adjusted as an adult?

Suggested Responses: Because Jamey was able to attach to his caregiver(s) during the brain's critical window of opportunity for social/emotional learning.

FULL SCRIPT - LESSON 2

How Learning Continues

Display T-2.9, *Lifelong Learning.*

Script

- As these windows close, much of the basic structure of the brain is completed, and much of the stage is set for how children will learn.
- The evidence also shows, however, that development continues throughout life. The brain may not develop as easily, but learning does continue. The brain structure that was set early in life may be altered, but not as easily as it could have been changed during those early years.
- Fortunately, this training is going to teach you what you can do within the first three years so that children have every opportunity to reach their potentials.

40

1 minute

Lecture

Review of Key Points

If needed, review the key points covered so far about areas of development and critical windows. OPTION: Ask volunteers to summarize the key points:

- So far, we've talked about the various areas of development and the brain's critical windows for growth.
- This training focuses on three areas of infant/toddler development: social/emotional, thinking/communicating, and physical.
- There are critical windows of brain development, when our brains *allow more learning* and actually *form more* connections than at any other times of our lives. How the brain becomes structured during these times becomes its basic structure for the rest of our lives, even though development continues throughout life.
- We have an important opportunity to help children develop because the most critical time in their lives for brain development happens to also be the same time these children will be in our care.
- Now let's move on to define responsive care.

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15 minutes

Lecture and Discussion

Responsive Care

Definition of Responsive Care

Display T-2.10, *The Brain: What Goes In and What Comes Out.*

Review the transparency, *The Brain: What Goes In and What Comes Out,* which was first seen in the Introduction. Refer to the first part of the visual (i.e., what goes in).

Script

As we talked about during Lesson One, caregivers provide part of what goes in to a child's brain development. The way you can help is by providing *responsive care* to children. Let's talk more about responsive care and how it's part of "what goes in" to children's development.

Refer to H-2.1, *Responsive Care Example.* Read the following example from the handout verbatim.

Script

Here's an example of responsive care: You are outside on your daily fresh air break with two infants. Today, you had planned to sing songs and play puppets with them in the fresh air. Robin, one of the infants, seems to get very cranky outdoors, so you know your time is limited.

You sing the songs and use the different puppets to give them each kisses. Andrew giggles with joy whenever you use the furry puppet, so you use that one when singing to him especially.

Just then, Robin begins shaking her head from side to side and waving her hands and feet. You know within moments she will begin crying if you do not go back inside.

You tell Robin that you know she wants to go inside now. You pack up the puppet show and children to go back inside. Once back inside, you pick up where you left off and continue playing puppet show.

FULL SCRIPT - LESSON 2

Display T-2.11, *Responsive Care.*

Refer to the prepared flipchart, *The Six T's of Responsive Care,* which should be posted in clear view of all participants throughout training.

Script

- This example is a good illustration of responsive care. According to the definition of responsive care, this means being attentive to the individual needs of each child, responding in a way that promotes developmental learning in at least one area, using the Six T's every day.
- *Tuning in* means really watching children's behavior, listening closely to them, and interpreting what they are telling you about themselves, their needs, their wants, their personalities. These children don't have words yet, so you have to watch for these clues.
- *Teaching* means using your knowledge of child development to plan experiences and activities that enhance children's learning and development.

Ask participants what their role of "teaching" means to them.

Suggested Responses:

- "Teaching" means providing opportunities for children to learn and supporting their efforts to develop new skills.
- To teach, you have to know what activities, materials, and experiences are appropriate for a group or individual children.
- "Teaching" here **does not** mean that children are expected to sit still while the teacher or caregiver talks. Teaching also **does not** mean giving children workbooks, ditto sheets, or flash cards.

Continue with the Six T's.

- *Time* means giving children your time each day, one on one.
- *Talk* means talking to each individual child every day.
- *Touch* means providing nurturing touch to each child every day. For example, you can rub backs, rub tummies, massage legs while diapering, stroke hair, hold hands. All of these are examples of appropriate touch.
- *Trust* means helping children develop a sense of trust by showing you care, meeting their needs, and being consistent.
- How do each of these Six T's relate to the brain research?

FULL SCRIPT - LESSON 2

Suggested Response: Each "T" that you provide helps the brain form more connections and grow to its full potential.

Script

How did the example of Robin on your handout (H-2.1) fit the definition of responsive care on the transparency?

Suggested Responses: The caregiver was attentive to the individual needs of each child, responded in a way that promoted developmental learning, and used the Six T's by:

- Tuning in - being attentive to Robin and Andrew's behavior and sounds.
- Teaching - planning an activity that is appropriate for infants and helps to promote thinking/communicating.
- Taking time each day to give them special attention.
- Talking to them.
- Touching them with puppet kisses.
- Building trust by meeting their needs and being consistent.

Refer participants to the Responsive Care job aid, which gives the definition of responsive care and lists the Six T's. Explain that this can be hung on the wall at work to remind everyone of the type of care they should provide.

Planned Times vs. Daily Routines

Display T-2.12, *When to Use Responsive Care*

Script

Sometimes, you plan which responsive care activities you are going to use ahead of time, such as when you write lesson plans.

Other times, you can provide responsive care through your daily routines. These are usually brief, spontaneous moments within your daily routines where you should consciously take time to promote development. For example, instead of simply diapering, you can incorporate developmental activities, such as telling the baby what you are doing first, second, third and so on, while allowing the child to touch your face and feel your mouth move.

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So, there are basically two different times when you can provide responsive care:

Planned Times
During Daily Routines

For infants, most of your responsive care will be provided during daily routines because most of the time you spend with infants centers around their basic needs (e.g., eating, sleeping, diapering, providing comfort). You can plan activities for infants as well, but most of the time will be spent performing daily routine activities.

For toddlers, a lot of opportunities for providing responsive care will be during planned times because less time is spent with toddlers doing daily routines.

Provide one or more of the following examples as needed until participants understand the difference between planned and daily routine activities. Note that all the examples you provide are designed to meet children's needs at certain ages and also promote learning in the three areas of development.

Script

Here are some more examples of planned responsive care activities.

- Play music at planned, specific times, and dance to it. You can begin by softly bouncing with younger infants.
- Place favorite toys in different parts of the room, and ask toddlers to bring the toys back to you.
- Plan to have messy experiences. Many infants love to touch their food and explore with their fingers.

Script

Here are some more examples of daily routine activities.

- Pretend that an infant is "telling you" something when she coos and gurgles. Expand on what she "says," and answer her "questions." Respond to her vocalizations by imitating her sounds. Let her touch your mouth as you speak.
- Get down to the toddler's eye level as opposed to looking down at her. Make eye contact when talking.
- Show acceptance of toddlers as you redirect "unacceptable" behavior.

For example, tell her that you still like her even though you do not like the way she is behaving. Then give her a hug.

Emphasize that sometimes it's what you "don't" do that's responsive.

Script

Sometimes, it's what you "don't" do that's responsive. Look for an infant's cues that he or she is overstimulated: turning away from you, moving eyes away from yours, arching his or her back, or squirming. These are all signs that a baby is feeling overwhelmed. To be responsive, you should recognize these cues and either slow down or stop doing what you're doing.

Primary Caregivers

Display T-2.13, *Primary Caregivers.*

One of the best ways to provide responsive care to infants and toddlers is to assign a primary caregiver for each child. Primary caregivers are not meant to be the "only" caregivers to a child, but they are meant to be a special contact for each child. Assigning primary caregivers helps provide consistency for children. Here are some ways to use primary caregiving:

- Children should go to their primary caregiver first thing in the morning to say hello and begin the day.
- Children should go to their primary caregiver during the day when they need comfort.
- Primary caregivers should plan activities for their assigned children.
- Primary caregivers should communicate with parents about their assigned children.
- Primary caregivers should feed and diaper their assigned infants most often, but other caregivers should also pitch in when a primary caregiver is busy.

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Definition of Unresponsive Care

Display T-2.14, *Responsive Care.*

Script

Now that you know what responsive care is (as shown on the transparency), how would you define unresponsive care?

Suggested Responses:

- Not being attentive to the individual needs of each child.
- Not responding in a way that promotes developmental learning in at least one area.
- Not using the Six T's every single day.

Script

What are some examples of unresponsive care you've seen?

Suggested Responses:

- Infant crying and no one attending to him.
- Propping a bottle.
- Infant put in a swing for a long period of time with no one interacting with him.
- Changing a diaper and not talking or interacting with the child.
- The "quiet" child that seldom misbehaves and seems to not need attention is often the child that does not receive responsive care.

Script

- Sometimes, caregivers believe that they are using responsive care, but they really are not.
- The key is that you must be tuned in to the child and teaching in at least one of the developmental areas. Questions that go along with any interaction with a child should be "What is this child's behavior telling me?" and "What learning am I trying to promote?"

Read one or both of the following examples verbatim until participants understand how unresponsive care can sometimes seem responsive.

Script

Here are some examples of care that you might think are responsive, but that are actually unresponsive given our definitions:

- A child tried to show Mr. Allen his drawing, and he responded, "Very nice, now sit down." Even though he said something to the child, his response did not promote a particular developmental area. A better response to promote all three areas might have been, "Tell me about your painting. You worked very hard on it! Look at all the bright colors! What color is that square? Let's feel the sun together—it feels hot, ouch!"
- A child was splashing at the water table and pulling someone's hair. Miss Nancy responded by saying, "Stop it! Don't do that!" This is not responsive because it does not teach anything. Responsive care would have been to talk about how the misbehavior made the other child feel.

Your Goal

DISPLAY T-2.15, *Your Goal.*

Script

Your goal, then, should be to give responsive care each and every time you interact with a child—infants and toddlers—during planned activities and daily routines.

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5 minutes

Group Discussion

Hurdles

DISPLAY T-2.15, *Your Goal.*

Script

How realistic is it for caregivers to meet the goal on the transparency (i.e., providing responsive care to every child during every interaction)?

If there are participants who do not think they can meet that goal, ask them to list some of the things that get in the way of providing responsive care. Record each of the participants' reasons or obstacles on a separate flipchart. Record only one reason/obstacle at the top of each flipchart page. You will post these in the front of the room after this discussion. If participants name obstacles which they are not empowered to actually change on the job (such as funding), record the reason as stated, but do not post after this discussion. Try to get six to eight reasons to post.

Suggested Responses: It is difficult to meet the goal of giving responsive care in every interaction because of the following hurdles:

- Limited resources
  - Assistance (child to caregiver ratio)
    - Money
    - Time
    - Space
    - Patience
    - Energy (exhaustion)
- Limited support
    - Administrators that are not supportive of the responsive care approach being taught in this training ("Don't pick up the child; you're just spoiling him!")
    - Parents with different philosophies that are not supportive of the responsive care approach being taught in this training

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FULL SCRIPT - LESSON 2

FULL SCRIPT - LESSON 2

- Interference
  - Other children
  - Health
  - Preoccupation (mind wandering)
  - Stress
  - Depression
- Personal filters
  - Values
  - Culture
  - Beliefs (e.g., "I didn't have responsive care, and I turned out O.K.!")
  - Childhood experiences
  - Parenting experiences
  - Previous training received or not received

Script

- Some of these hurdles cannot be changed by caregivers, such as money or assistance. You usually have little power over your facility's budget or hiring process.
- But you can control many of the other hurdles so that you can provide responsive care.

To prepare for the next activity, post these flipcharts around the front of the room in clear view of all participants.

20 minutes

Activity 2.1

Hurdles and Helps

Materials

- 6 – 8 flipcharts posted around the front of the room, each labeled at the top with one hurdle (Note: Each flipchart should contain only one obstacle to providing responsive care.)
- 8 different colored markers
- T-2.16, *Hurdles and Helps (1)*
- T-2.17, *Hurdles and Helps (2)*

Preparation

- Make sure each flipchart containing a hurdle is posted before beginning this activity.

Key Points

Participants should recognize these common hurdles when they occur on the job and overcome them using the ideas generated in this activity.

Directions

1. Tell participants that, in this activity, they will come up with ideas and solutions for overcoming the hurdles they've listed. Once they've come up with ways to handle each hurdle, they will be better able to overcome hurdles on the job and provide the responsive care children need.
2. Ask participants to break into groups of four to complete this activity.
3. Give each group a different colored marker.
4. Assign each group to stand in front of one of the flipcharts.
5. Ask groups to list as many ideas as possible for overcoming the hurdles on the flipchart. Allow participants two to three minutes.
6. After two to three minutes, give participants a signal to move clockwise to the next flipchart. As participants move around the room and generate possible solutions, you may want to gradually decrease the amount of time at each chart.
7. When all rounds are complete, ask that everyone return to their seats. Thank them for their input, and tell them that now they will try to apply their solutions to two brief scenarios.

8. Display T-2.16, which says, "Miss Tara feels caregivers should not pick up a baby each time the baby cries. This, she believes, spoils children and makes more work for caregivers."
9. Ask participants to use the hurdles and helps they've just completed or come up with new ones to answer this question: Which hurdles are described in this example, and how might the caregiver overcome them?

   Suggested Responses: The hurdles are Miss Tara's beliefs and possibly exhaustion. To overcome, she could recognize signs that she is tired and take time for herself, reduce stress, focus away from the hurdle and focus on applying the Six T's, respond more quickly and consistently to infant's cries. This actually encourages the infant to cry less often.

10. Display T-2.17, which says, "You've had a personal problem all week. You feel like snapping, and you can't focus. You're exhausted, and your head is pounding."
11. Ask participants to use the hurdles and helps they've just completed or come up with new ones to answer this question: Which hurdles are described in this example, and how might the caregiver overcome them?

    Suggested Responses: The hurdles are limited patience, health problems, and mind wandering. You could reduce stress in your life overall, ensure that planning and consistency are part of the daily routine, take time for yourself, focus away from the hurdles and toward applying the Six T's.

12. Conclude by telling participants that caring for young children is both a rewarding and difficult job. Hopefully, this activity helped them be more aware of the potential barriers and gave them some ideas for overcoming those barriers. Thank everyone for their input.

1 minute

Lecture

Review of Key Points

If needed, review the key points covered so far about responsive care, unresponsive care, goals, and hurdles and helps. OPTION: Ask volunteers to summarize the key points:

- In this lesson, we've talked about responsive care, unresponsive care, your goals, and hurdles and helps.
- It's important to provide responsive care during "critical windows" of children's development.
- Responsive care allows us to use the critical windows of time for brain development wisely by helping babies' brains form as many connections as possible during this time.
- Responsive care is being attentive to the individual needs of each child, responding in a way that promotes developmental learning in at least one area, using the Six T's every day (*tuning in, teaching, time, talking, touching, trust*).
- Unresponsive care is not being attentive to the individual needs of each child, not responding in a way that promotes developmental learning, and not using the Six T's every day.
- Your goal is to give responsive care each and every time you interact with a child.
- Sometimes, we may feel that certain hurdles prevent us from providing responsive care as often as we should. We should recognize these hurdles and try to overcome them using the strategies participants came up with in this lesson.

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15 minutes

Group Discussion

Brain Development

Display T-2.18, *The Brain: What Goes In and What Comes Out.*

Review the transparency, *The Brain: What Goes In and What Comes Out,* first seen in the Introduction. Refer to the second part of the visual (i.e., the brain).

Script

Now that you know what type of care you should give to best help children develop, let's talk about what is actually going on in the brain.

Heredity

Display T-2.19, *Heredity: The Genes Given to Us by Our Parents.*

- Each person is born with over 100 billion brain cells—or neurons, as they also are called. These neurons are all connected to each other. Our genes—inherited from our parents—set the basic structure of how these neurons are connected to each other.
- While heredity determines the basic way our brain cells operate and connect to each other, the information coming in from the environment can change that structure and add to the basic set of connections we're born with. The outside world comes in through the senses (i.e., sight, touch, smell, hearing, taste) and **interacts** with the brain to create or change existing connections. As the brain changes, we are learning.

What's a Neuron?

Display T-2.20, *Neurons: The Building Blocks.*

- Neurons are the same as brain cells.
- When we are born, we are given more than 100 billion neurons (brain cells).
- If you look at the transparency, the large part of the **neuron** that you see is the **cell body**.
- The branch coming out of the cell body is the **axon**.

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- The axon contains chemicals called **neurotransmitters**. These chemicals carry the messages from one brain cell to the next.
- The end of the axon is called a **terminal**, and it is here that the neuron stores its neurotransmitters while they wait to be released.
- Terminals release neurotransmitters to the **dendrites**.
- **Dendrites** look like fingers at the end of each neuron. The dendrites are the structures that receive the neurotransmitters from the axon's terminal end.
- The small space between the axon of one cell and the dendrite of another cell is called a **synapse**. This is where connections are made between single neurons. The neurotransmitter chemicals "jump" across the space and communication happens. The brain cells "talk" to each other over synapse spaces—but instead of shouting (like two people might do if they were on either side of a stream of water), they shoot chemical messages to each other (like those two people might do if they tossed a ball to each other with messages written on the ball).

See Appendix for additional references and resources. *NOTE*: To further convey how messages are communicated, you might demonstrate with one or two analogies: 1) compare a neuron and its parts to an arm, hand, and fingers, and/or 2) compare neural communication to two people shouting across a river.

How Neural Connections Form

Display T-2.21, *Synaptic Density.*

- When we are born, we have over 100 billion neurons (brain cells) and about 50 trillion synapses where the neurons connect.
- More and more connections are formed all the time as a child experiences and learns.
- By the time a child is six, there may be over 1,000 trillion synapses in his or her brain connecting ideas, memories, and experiences to each other.
- You can see by the time an individual reaches the age of 14, there aren't as many synapses in the brain as when the child was six. That's because a lot of the connections that were made earlier in life don't exist anymore—many connections literally die away.

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How Neural Connections Strengthen

Display T-2.22, *Use It or Lose It.*

- The reason that some of the connections die away is because of the "use it or lose it" principle.
- New scientific data has taught us that the strengthening or weakening of neural connections depends on the child's experiences. The connections that are used the most are the ones that remain in the brain and form a base for future learning. The connections that don't get used much eventually fade away and die.
- For example, when children are exposed over and over to their mothers' voice, this connection is strengthened, and the child begins to connect the voice with the person. Your mother's voice is a sound you will recognize into adulthood. But, a voice that the child only hears once or twice would not be recognizable. That's because the connection that was once made between this voice and the person died away.

Script

Here are some examples of how the "use it or lose it" principle relates to the care you give to children:

- If you're a caregiver and you read a lot to a child, what you'll see is more neural connections in the language area of her brain. This child will be better able to use language than if she had been read to less often.
- If you're a caregiver and you respond immediately to an infant's cries by picking him up and taking care of his needs, then the infant will actually have more neural connections and stronger connections in the social/emotional part of his brain. He will be better able to trust others in life than if you were unresponsive.
- If you're a caregiver and you make sure you do activities each day that focus on each of the child's five senses (sight, touch, smell, hearing, taste), the child will become more developed in all three areas of learning (social/emotional, thinking/communicating, and physical) than if you did not take time to stimulate all the senses each day.

New Technologies

Script

- How do we know that brain connections grow?
- We now know more about how the brain grows than ever because of new technologies that let us see brain activity, including PET scans, CAT scans, and MRIs.
- These scans have been around for a long time, but what's new is the way they now let us see activity in different parts of the brain at different times.

Ask participants how many have had any of these tests done. Conclude that some participants, then, are familiar with these scans.

Display T-2.23, *PET Scans: One Month and Eight Months.*

Script

- One way scientists watch the brain is through PET scans.
- PET stands for *positron emission tomography.*
- To conduct a PET scan, scientists must first inject a person with a dye-like substance that can be detected in the brain. The substance contains sugar. When the brain is actively working and forming connections, it burns the sugar—just like we might burn off a candy bar if we run or jump. In other words, it uses the sugar for food so it has the energy to keep working and making connections. Then, scientists use a scanner to see where the sugar is being burned. This shows up on a PET scan as areas of a darker color. Scientists conclude that the brain is most active wherever the sugar is being used the most.

Discuss the PET scans.

- In T-2.23, you can see how a PET scan shows where the brain is active. The darker areas on the infant's PET scan show where activity was happening the most at one month of age. These darker areas happen to be the areas that take care of our basic needs, like breathing and heart rate.
- As we get older, other parts of the brain become more active. In the transparency, we see the same infant's PET scan at eight months old. Here, we see even more dark spots because more activity is happening in the brain than at one month. For example, notice how there is more activity

in the frontal lobe area of the brain at eight months than at one month. This area is where a lot of social/emotional and thinking/communicating development occurs.

Display T-2.24, *PET Scans: Five Days to 28 Years.*

- In T-2.24, we see that the brain of a one-year-old looks more like the adult's brain than a newborn's brain.
- This just goes to show how important the first three years of life are for brain development and learning: the majority of brain development and learning occurs early on.
- That is why we see such dramatic changes in the first year of life. We see children go from being helpless beings to children who walk, talk, reason, and interact. We do not see such quick development later in life from year to year. For example, we generally do not see someone who is 27 years old become able to do such dramatically different activities by the time she is 28.

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Effects of Abuse and Neglect

Display T- 2.25, *Effects of Extreme Deprivation.*

- Abuse and neglect are forms of extreme unresponsive care.
- The left side of this transparency shows a brain that is healthy. The right side shows a brain of a child who has been neglected. The red and yellow areas are the most active parts of each brain.
- As the transparency shows, the healthy brain is much more active, growing, and learning than the neglected brain.
- Brain research has shown that when children experience abuse and neglect, the connections in their brains may actually be wired for aggression and learning difficulties. This means these children will be more likely to hit, bite, protect themselves, and use other aggressive behaviors than other children.
- Also, some of the research says that children exposed to chronic stress are not only wired for aggression and learning problems, but they actually develop smaller brains than children who grow up in a relatively stress-free environment.

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- We sometimes see the same effects in children whose moms are stressed or depressed. Children's brains become wired to learn the negative emotions and behaviors they are around. For example, children whose mothers are under a lot of stress or are often depressed, also seem to get stressed and depressed.

Implications for Caregivers

Display T-2.26, *What the Brain Research Means to You.*

Script

- What does all this brain research mean for you? If a child receives little stimulation early on, synapses (or the connections) will not develop, and the brain will make fewer connections.
- So, here's how all of this relates to you: The more you provide responsive care, the more neural connections each child's brain will grow and the stronger those connections will become. A child's experiences—good or bad—influence the way in which connections are made in his or her brain. So while positive experiences and care will produce one set of connections, negative experiences (or unresponsive care) can produce an entirely different set of connections.

Display T-2.27, *Lifelong Learning.*

It should be emphasized again here, though, that research has also shown that learning does not stop. It is a lifelong activity. We can in large part overcome the effects of deprivation early in life. But, we are here in training to prevent deprivation from happening in the first place and to give children every chance while in our care to reach their full potentials.

See Appendix for additional references and resources.

5 minutes

Group Discussion

Results of Your Care

Display T-2.28, *The Brain: What Goes In and What Comes Out.*

Review the transparency, *The Brain: What Goes In and What Comes Out,* first seen in the *Introduction.* Refer to the last part of the visual (i.e., output).

Script

- Now that you know what type of care you should provide and how that care helps the brain to grow, let's summarize the results of your care in children's lives.

Refer to H-2.2, *Results of Your Care,* which contains the following:

Results of Responsive Care

- Children get along better with others in life.
- There's a better chance that children who experience abuse growing up won't abuse others when they get to be adults.
- Children do better in school.
- Children have fewer behavior problems.
- Children can handle stress and shock better in life.
- Children have greater self-esteem and like themselves when they are adults.
- Children understand other people better in life.
- Children can solve problems better in life.

Results of Unresponsive Care

- Children can't learn as easily in the future.
- Children have more emotional problems in life.
- Children feel threatened more easily.
- Children are quicker to respond with aggression.
- Children can't concentrate as well.
- Children are more anxious throughout life.
- Children are more depressed in life.
- Children have more health problems in life. 60

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- Children's brains are sometimes smaller compared to other children their age.
- Children are more likely to experience problems with language and reading.
- Children don't get along with others very well in life.
- Children are more likely to be addicted later in life.
- There's a better chance that children will be in an abusive relationship later in life.

Script

This list includes the results of responsive care and unresponsive care. These statements are taken from research on brain development, such as that published in *Rethinking the Brain* by the Families and Work Institute.

Give a few examples of how these results relate the brain research. Then, ask several volunteers to do the same.

Script

- Let's look at the first result listed under responsive care, "Children get along better with others in life." How would the brain research explain this result? Well, the brain research would say that responsive care helps children in the social/emotional areas of the brain. Brain cells grow and connect to other brain cells. Over time, the brain connects "people" with the idea of "trust." This lays the foundation for how we form our social relationships later in life. So, later in life, we react to people with more trust and ease, rather than with suspicion and aggression.
- Let's look at the first result listed under unresponsive care, "Children can't learn as easily in the future." How would the brain research explain this result? The brain research would say that if early developmental learning does not happen, then children do not have the foundation of learning that they need to learn more difficult skills. Until basic brain cell connections are formed, complex language skills, physical tasks, and social skills will not be possible. Through responsive care, caregivers can "teach" these developmental skills, which form the basic brain connections needed for more intricate brain connections later on. Just like a house: You can't build a house until you've built its foundation.

Ask several volunteers to choose one of the results listed on the handout and link it to the brain research as you have done in the examples. If no one volunteers, choose participants, assign one of the results, and help them to link the result to the research. NOTE: Spend only a few minutes on this exercise and move on.

Prompt volunteers using the following optional questions:

- Which areas of development (or non-development) probably contributed to the result?
- How might a child's brain cells connect different skills and ideas to cause this result?
- How do these early connections form a foundation for later learning and well-being?

Results that might be "easier" for participants to link to the brain research are:

- Children do better in school and can solve problems better in life (because the basic brain cell connections for thinking and communicating have formed a foundation for learning).
- Children have fewer behavior problems and get along better with others (because positive early experiences affect children's social/emotional development. They learned early to "trust" and feel good about themselves).
- Children feel threatened more easily (because they did not have proper social/emotional development to learn early on to "trust" others or they have learned to associate others' attention with threat or hurt).
- Children are more likely to experience problems with language and reading (children need a rich, stimulating environment to develop proper language. When they do not receive this, the thinking/communicating part of their brain is unable to form the connections needed for learning).
- Children are more depressed in life (because children's brains adapt to the emotions that are around them).

20 minutes

Activity 2.2

"I Am Your Child" Video

Materials

- "I Am Your Child" videotape
- VCR
- Monitor

Preparation

Cue the videotape to the beginning of the tape so that the VCR/monitor only needs to be powered on for this activity.

Key Points

This activity should reinforce what participants have learned so far. See the Key Discussion Points below.

Directions

1. Introduce the video: Let's watch a video, which summarizes many of the ideas you've learned so far. The video is intended to be viewed by parents, but the ideas it talks about apply to caregivers like you as well.
2. Show the following segments of the videotape, "I Am Your Child":
   - Introduction
   - Bonding and Attachment
   - Communication
3. If time permits, show the entire video.
4. After each segment, stop the videotape and discuss how the segment related to brain development and responsive care. Make the key points below.

Key Discussion Points:

Introduction

- What did this segment say about the brain research you learned about?

  Suggested Responses: New scientific evidence shows that after birth, the brain grows and organizes itself through experiences and stimulation from

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the outside world. In the beginning years of life, the caregivers in this class are a major part of children's worlds.

- What did this segment say about the importance of responsive care?

Suggested Responses: Healthy brain connections depend on healthy human connections.

Bonding and Attachment

- How would you summarize this segment?

Suggested Responses: The most critical factor in babies' development is attachment to caregivers. In the first few months, one of the most important ways to affect attachment is through touch.

- What did this segment say about the brain research?

Suggested Responses: Touch activates different parts of the brain.

- How were the Six T's of responsive care used by caregivers in this segment?

Suggested Responses: Touch was used to build trust; caregivers took time to tune in and talk to babies; all of the responsive interaction taught the children to trust and helped their brains develop in all areas of development.

Communication

- How would you summarize this segment?

Suggested Responses: Look and listen to babies' signals even before they're able to talk. They want to know that someone cares and is connected to them.

- What did this segment say about the brain research?

Suggested Responses: Two-way communication reinforces pathways in the brain that affect trust and language development.

4. How were the Six T's of responsive care used by caregivers in this segment?

   Suggested Responses: Touch was used to communicate; caregivers took time to tune in and talk to babies in order to communicate; all of the responsive interaction taught the children by helping them develop in all areas of development.

5. Conclude that this video reinforces the importance of participants' caregiving role. Children's brain development depends on what they experience. It is up to caregivers to provide responsive care.
6. Transition by telling participants that, in the next activity, we will put what they've learned to the test.

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20 minutes

Activity 2.3

Neural Connections

Materials

- Ball of yarn
- H-2.3, *Neural Connections*

Preparation

Make one copy of H-2.3, and cut the copy along the dotted lines to make cards for participants.

Key Points

This activity should reinforce what participants have learned so far. The yarn will represent neural connections that will grow and became stronger with learning. Just as the connection made of yarn will grow, so will participants' actual brain connections. By "using" the information learned, they will increase the connections in their own brains.

Directions

1. Tell participants that, in this activity, we will see how much they have learned in this lesson so far.
2. Ask participants to stand and form a circle.
3. Give one participant a ball of yarn to hold.
4. Give each participant one or two index cards until all index cards have been passed out. Written on the cards are brief descriptions of a caregiving situation and multiple choices for completing the statements. NOTE: If time is running short, you may want to ask each participant to only take one index card each.
5. The first participant holding the yarn should read one of his or her index cards to the group, including the multiple choices.

   NOTE: If you suspect that there are participants in class with reading challenges, the trainer should go around the circle and read all participants' cards for them when the yarn is thrown to them.

6. The person with the yarn should wrap the yarn around his or her wrist and toss the yarn to the first person who answers the question correctly.

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Each time the yarn is tossed, the receiver should wrap it around his or her wrist so that a giant web of "neural connections" is formed. Then, that person should read one of his or her index cards. The activity should continue in this manner until all cards have been read and answered. NOTE: Only one index card per person should be read at a time. This will ensure a larger web to form.

7. See the answers below to check participants' responses.
8. After all cards have been answered, ask participants to return to their seats.
9. When everyone is seated, ask: What was the significance of the yarn?

   Suggested Responses: The yarn represented the neural connections that grew and became stronger and more numerous with learning.

10. Conclude that just as our neural connection made of yarn grew, so did participants' actual brain connections. By "using" the information learned, they increased the quantity and strength of connections in their own brains within minutes!
11. Transition by saying, "next, we will wrap up this lesson."

Answers by Card Number:

1. A: Social/emotional development
2. C: Other brain cells
3. B: For the rest of his life
4. A: Dendrites of other brain cells
5. B: Neurotransmitters
6. C: Died
7. A: Physical development
8. B: Physical development
9. A: Fine motor skills
10. C: Thinking/communicating development
11. A: Trust caregivers
12. B: Can be changed through experience
13. Tuning in, translating, teaching, time, talking, touching, trust
14. C: Overcoming hurdles to responsive care
15. A: Routines
16. A: Social/emotional
17. B: Teaching
18. C: Thinking and communicating
19. B: Every single day
20. C: Trust
21. B: PET scan
22. A: Inherited from our parents
23. A: "Use it or lose" it principle
24. A: Social/emotional area
25. C: Every day
26. B: Listening to them
27. A: Developmental area
28. B: Unresponsive care
29. B: Stronger
30. A: Emotional problems

2 minutes

Closing

Display T-2.29, *Goals*.

Script

By now, you should be able to

- Explain the three main types of development.
- Explain the meaning of "responsive care."
- Discuss why it might be difficult to provide responsive care at times and what might make it easier.
- Explain how a child's brain grows.
- Give reasons why you should provide responsive care to every child every day.

Script

- There is additional information regarding the brain research in the green section of your Resource Material. You may refer to this material after class.
- Next, in *Lesson Three: How Do I Provide Responsive Care?*, we will learn more specific activities you can use to provide responsive care.

LESSON 3

How Can I Provide Responsive Care?

1 Hour

Lesson Three Checklist

Preparation

- ❑ Make enough copies of H-3.1 for each participant.
- ❑ Copy H-3.2 on three different colors of paper: (1) The social/emotional learning section should be copied onto pink; (2) The thinking/communicating learning section should be copied onto blue; and (3) The physical learning section should be copied onto yellow. These sections are referred to by color throughout the training. Make enough copies of H-3.2 for each participant.

Materials

- ❑ T-3.1 through 3.10
- ❑ H-3.1, *Activities Matrix*
- ❑ H-3.2, *How Can I Provide Responsive Care?*
- ❑ Flipchart
- ❑ Markers

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What and How	Materials	Time
Introduction **Opening** Tell participants that, in this lesson, they will learn more specific ways to provide responsive care. Tell them that you know many of them are already providing responsive care on the job. Ask them how they hope to improve their responsive care skills through this lesson. **Goals for the Lesson** Relate participants' hopes to the objectives. T-3.1 through 3.2		5 minutes
Short Lecture **Review: Responsive Care Definition** Review the responsive care definition, focusing on the meaning of *individual needs* and *developmental needs*. **What Are Individual Needs?** Explain that individual needs come from factors such as emotions, abilities, interests, personality, culture, home life, and learning style. **Being Attentive to Behavior** Ask participants how they've been able to determine children's individual needs. The answer is by watching behavior. Explain that because children may not have language to express their needs, we have to observe their behavior. Give suggestions for being attentive.	• T-3.3 through T-3.7 • H-3.1, *Activities Matrix*	5 minutes

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TRAINING AT A GLANCE - LESSON 3

What and How	Materials	Time
What Are Developmental Needs? Explain that developmental needs are what a child needs to help him or her grow at each stage of life. We must try to meet their needs through activities that are appropriate for the child's age and developmental stage and teach in at least one developmental area each time we interact. **Responding Developmentally** Explain that the Activities Matrix gives suggestions for developmental activities. Discuss the overall organization of the Activities Matrix and the type of information contained in each of its columns. Encourage its use as a planning tool on the job, but emphasize that it is just a sampling of activities, not a comprehensive list. Make sure participants understand the importance of reviewing the sample daily routine activities, even though they do not plan for daily routines.		

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What and How	Materials	Time
Group Discussion **Scheduling** Alert participants to the fact that the first planned activity on each social/emotional page refers to the need for scheduling and consistency. (Point out that scheduling is more necessary for toddlers, while a less rigid routine is better for infants.) Ask why scheduling and consistency are important for development. Scheduling and consistency help to build trust and allow us to work on specific developmental areas. Emphasize the importance of scheduling outdoor time. Ask participants to take some time and write down their typical schedules. They should then share their schedules with the class. Ask the rest of the class for input on how the schedule aids development and how it might be improved.	T-3.8	15 minutes
Activity 3.1 **How Can I Provide Responsive Care?** This activity will help participants apply responsive care to on-the-job situations. Participants work in small groups. They read scenarios about children and answer questions to identify appropriate responsive care activities for the children. They should use the Activities Matrix, but can also identify activities not on the Matrix if appropriate. Ask different groups for their answers, and discuss the questions with the large group as well.	• H-3.1, *Activities Matrix* • H-3.2, *How Can I Provide Responsive Care?*	30 minutes

TRAINING AT A GLANCE - LESSON 3

What and How	Materials	Time
Closing Recap Lesson Three to ensure participants leave with the main idea: apply responsive care on the job by attending to both individual and developmental needs. Review the lesson goals, and ask if they think they've achieved them. Conclude emphasizing participants' importance as caregivers. 74	T-3.9 through 3.10	5 minutes
		Total: 1 Hour

5 minutes

Introduction

How Can I Provide Responsive Care?

Opening

Display T-3.1, *LESSON 3: How Can I Provide Responsive Care?*

Script

In this lesson, we are going to talk about more specific ways to give responsive care. You know what responsive care is now and many of you are already providing it. So, how do you hope this lesson will improve your ability to give responsive care?

Suggested Responses: I hope this lesson

- Provides additional ideas and activities
- Offers me ideas for helping children with specific needs
- Helps me select activities that are appropriate for my age group

Record participants' responses on a flipchart.

Goals for the Lesson

Display T-3.2, *Goals.*

Relate participants' hopes for this lesson to the skills that will be covered.

Script

Many of your hopes will be met through this lesson. By the end of this lesson, you will be able to

- Define *individual needs* and *developmental needs.*
- Identify messages that children send about their needs.
- Explain the importance of scheduling.
- Choose activities that meet children's individual and developmental needs.

5 minutes

Short Lecture

Review: Responsive Care Definition

Display T-3.3, *Responsive Care.*

The first part of the definition on the transparency is highlighted.

Script

- Let's go over each part of the responsive care definition now in more depth. You will need a better understanding of the definition in order to come up with your own ideas for providing responsive care on the job.
- We'll start at the beginning with the meaning of: "Being attentive to the individual needs of a child."
- This part of the definition corresponds to the first "T" of responsive care: Tuning in.

What Are Individual Needs?

DISPLAY T-3.4, *Individual Needs.*

Script

What are individual needs?

- Each child has his or her own unique learning needs because of the child's particular emotions, abilities, interests, personality, culture, home life, and learning style.
- Your job is to watch closely and learn to read and understand a child's individual learning needs (i.e., tune in).

Being Attentive to Behavior

Script

- How have you been able to figure out the individual needs of the children you care for?

Suggested Responses: By watching their behavior.

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Display T-3.5, *Being Attentive.*

Children send us clues all the time about what and how they need to learn. You should become an expert at interpreting the clues

- Don't jump to conclusions about what a child needs until you think about all the clues.
- Listen carefully to their words and noises.
- Watch their nonverbal behavior.
- Look for new behaviors.

What Are Developmental Needs?

Display T-3.6, *Responsive Care.*

Script

- Let's go over the second part of the definition of responsive care: "Responding in a way that promotes developmental learning in at least one area."
- This part of the definition corresponds to the last five T's of responsive care: Teaching, Time, Talking, Touching, Trust.

Display T-3.7, *Developmental Needs.*

Script

When we talk about developmental needs, we mean what a child needs to help him or her grow at each stage of life. To meet a child's developmental needs, we must offer activities that

- Are appropriate to the child's age, and/or developmental stage. NOTE: It may be important to acknowledge that children with special needs may be functioning at a stage lower than their chronological age. Caregivers will need to provide activities that are at the child's developmental age.
- Promote social/emotional, thinking/communicating, and physical development.

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Responding Developmentally

Refer to H-3.2, *Activities Matrix.*

Script

- The Activities Matrix lists some sample ideas for developmental learning activities.
- These are just a few of the activities you can do with children. The Activities Matrix does not contain a complete list. You may think of many others that are also appropriate, and it's all right to use those as well as long as they are developmentally appropriate for each child.

Go over the organization of the Matrix.

Script

- The Activities Matrix is organized by learning type and age group.
- The matrix is divided into the three main learning types: (1) the pink section contains activities for social/emotional learning; (2) the blue section contains activities for thinking/communicating; and (3) the yellow section contains activities for physical learning.
- There are separate pages within each colored section for infants, young toddlers, and older toddlers.
- The columns on the matrix contain useful information, including what children can do, what they are working on developmentally, planned activities that help meet their needs, and daily routine activities that help meet their needs. The last column describes how the activities link to the brain research.
- We're going to use this in training, but we also hope that you will use this as a planning tool back on the job.

Script

Why do you think it's important to see samples of daily routine activities if you don't plan for these interactions ahead of time?

Suggested Responses: Even though we do not plan for interactions that occur within our daily routines, it is important to have a general idea of responsive activities that encourage growth in the different developmental areas. We should take every opportunity possible to engage children in responsive activities, whether planned or unplanned.

15 minutes

Group Discussion

Scheduling

Script

Notice that the first planned activity on each social/emotional page for toddlers is "Schedule daily activities and stick to the schedule to provide consistency and security for children." Why is scheduling so important to toddlers' development?

Suggested Responses:

- Consistency and security help children develop a sense of trust, which is part of social/emotional development.
- Planned time will allow both groups and individuals to work on specific developmental areas.

Script

- Notice that on the infants' social/emotional page, it says, "Sequence activities and routines consistently for each child, but remain flexible to meet individual needs as children grow and change."
- You should have more of a routine with infants than a rigid schedule. The important thing is to provide consistency, yet be flexible.

Emphasize the importance of scheduled outdoor time.

Script

- One important activity to schedule for both infants and toddlers is outdoor time.
- You will see outdoor time throughout the Matrix.

Display T-3.8, *Scheduling.*

Ask participants to take a few moments and write down their typical daily schedules. Prompt participants to record what they do that is consistent each day, such as greeting, activity time, nap time, and so on.

Ask a few volunteers to share their schedule with the class. Record each schedule that is shared on the flipchart. Discuss with the large group:

- How does this schedule help children develop?
- How does this schedule help caregivers provide responsive care?
- Is there anything you would change about this schedule?

Thank participants for sharing their schedules. Conclude this activity by encouraging participants to think about the way in which scheduling influences their efforts to provide responsive care.

Script

- I encourage everyone to take some time back on the job to think about your schedules some more, get the input of the other caregivers, and try to improve them.
- Remember: The bottom line is that scheduling is one of the most important developmental activities on this Matrix.
- Consistency will actually help children develop a sense of trust and can improve their behavior, which would make life easier for you!

30 minutes

Activity 3.1

How Can I Provide Responsive Care?

Materials

H-3.1, *Activities Matrix*
H-3.2, *How Can I Provide Responsive Care?*

Preparation

Make enough copies of H-3.2, *How Can I Provide Responsive Care?*, for each participant in class.

Key Points

We should choose developmental activities for children based on their individual needs and stage of development.

Directions

1. Tell participants that they will now take what they've learned about responsive care and apply it to on-the-job situations.
2. They will need both H-3.1, *Activities Matrix,* and H-3.2, *How Can I Provide Responsive Care?,* for this activity.
3. Ask participants to break into groups of four.
4. Assign a scenario (or more than one depending on group size) to each group. Ask participants to read the scenario(s) and select appropriate responsive care activities to use in the different scenarios. Explain that some of the scenarios will ask for activities that are appropriate for an individual child while others will ask for activities appropriate for the group.
5. Remind participants that the Activities Matrix contains many sample activity ideas but is not all-inclusive. They may think of other activities, not on the Matrix, that are appropriate for the scenarios as well.
6. Ask each group to elect a leader and recorder from the group. The leader should read the scenario and questions out loud, lead the group to answer the questions that follow each scenario, and report the group's answers. The recorder should chart the group's responses onto flipchart paper.
7. Debrief each question by asking a different group for their answer. Discuss with the large group to see if there are differing opinions or responses.

8. See the Answers below.
9. Thank everyone for their work on this activity. Conclude by pointing out that when we chose activities in this exercise, we took into account both children's individual needs and their developmental stage. Encourage participants to do the same on the job, whether they are planning activities or using them during daily routines.

Answers

1. It was Jenny's first day in preschool. She sat away from others all day and barely spoke.

   - What does this child's behavior tell you?

     Suggested Response: Jenny may have a shy personality, or she may feel scared and nervous.

   - What area(s) of developmental learning should you try to promote given this behavior?

     Suggested Response: Social/emotional. Jenny may need extra help learning to meet and make friends with others.

   - What planned or daily routine activities could you use to support this child's individual and developmental needs?

     Suggested Response: Assign a buddy to Jenny who is a very social child. Give the buddy specific activities to do with Jenny throughout the day.

   - How do you think the activities you've chosen link to the brain research?

     Suggested Responses: The buddy system may give Jenny a model of social behavior to learn from. Also, activities that encourage cooperation help children to combat feelings of stress and develop a sense of confidence and control.

2. When Julia (four-months-old) wakes up from her nap, she begins waving her arms and kicking her feet.

FULL SCRIPT - LESSON 3

- What does Julia's behavior tell you?

  Suggested Responses: This might mean she is ready to get up and play, be held, or perhaps needs a diaper change.

- What area(s) of developmental learning should you try to promote given this behavior?

  Suggested Responses: All of these areas may be appropriate.

- What planned or daily routine activities could you use to support this child's individual and developmental needs?

  Suggested Responses: Infants should only be in their cribs for sleeping. They should always be removed from the crib once they are awake. If Julia is distressed, move in quickly to pick her up and comfort her. If she needs a diaper change, talk to her about what you are doing.

- How do the activities you've chosen link to the brain research?

  Suggested Responses: Predictability and consistency are important elements in helping infants form trust. When caregivers are available and move in quickly to attend to their needs, children learn basic trust in the world around them.

3. Tony, 26 months, refuses to pick up his toys whenever it's clean-up time. If asked to clean up, Tony will say, "No!" and walk away. He often wants to keep playing with other toys.

   - What does Tony's behavior tell you?

     Suggested Responses: Maybe Tony is not required to clean up at home. Perhaps he has a difficult time with transitions, that is, moving from one activity to the next.

   - What area(s) of developmental learning should you try to promote given this behavior?

     Suggested Responses: All may be appropriate.

FULL SCRIPT - LESSON 3

- What planned or daily routine activities could you use to support Tony's individual and developmental needs?

  Suggested Responses: Encourage Tony's efforts to clean up. Stick to a daily schedule. Post a picture schedule and refer to it when it's clean-up time. Talk about getting ready to clean up 3-5 minutes before starting the clean-up process. Model good clean-up behavior for the children. Pair a couple of children to work together to clean, and give each separate tasks. Make clean-up time fun by singing songs and making it a game. Provide toddler-sized cleaning tools.

- How do the activities you've chosen link to brain research?

  Suggested Responses: Activities that encourage cooperation help children develop control. Daily routines and rituals associated with positive feelings are reassuring to children and help them know what to expect. These repeated experiences help form strong connections in the brain. Incorporating singing into daily routines helps strengthen the connections needed for language development. Practicing motor skills strengthens the pathways that go from the brain's thinking areas to the motor areas and out to the nerves that move muscles.

4. Alex is a 15-month-old biter. He keeps biting all the other children.

- What does Alex's behavior tell you?

  Suggested Responses: Maybe this is Alex's way of showing anger. Often, biting is also a sign of frustration or not enough physical space. Because children don't have language to express this frustration and anger, sometimes they bite.

- What areas of developmental learning should you try to promote given this behavior?

  Suggested Responses: Social/emotional, communicating, and physical.

- What planned or daily routine activities could you use to support this child's individual and developmental needs?

Suggested Responses: Support his social/emotional learning by giving choices. Also, provide plenty of unhurried time when Alex can play by himself, in an uncrowded space. Encourage his vocabulary with different activities, such as taking "word walks" around the room, reading stories to him, and incorporating repetition into daily routines (e.g., naming foods during mealtime). Help Alex channel his energy more appropriately with physical activity, like outdoor play, which uses large muscle groups.

- How do the activities you've chosen link to the brain research?

Suggested Responses: The size of a two-year-old's vocabulary is strongly related to how much an adult talks to the child, and repetition forms connections in the auditory cortex. Neural pathways grow by providing stimulation to the senses. By giving opportunities for physical activity, Alex's neural pathways will grow and so will his physical capabilities.

5. Today, you have planned to spend some time on a thinking/communicating activity with your afternoon group. They range in age from 22 months to 32 months. From youngest to oldest, there is Octavian, Kendra, Sheila, Tavia, and Justin. You decide to combine this structured activity with your regularly scheduled outdoor time.

- Should outdoor time be structured, unstructured, or both?

Suggested Responses: Both.

- What are at least three different thinking/communicating activities that you can work on with this group outside?

Suggested Responses: Take a word walk outside. Read stories. Sing songs. Play music and dance. Play "Simon Says." Have a puppet show. Plan a cooking activity or picnic.

- How do the activities you've chosen link to the brain research?

Suggested Responses: Creating a stimulating environment and incorporating language into da0000ily routines helps to form and strengthen

the connections necessary for language development. Connections form when the chemicals (neurotransmitters) "jump" across the space (synapse) between the axon of one cell and the dendrite of another cell. When these chemicals jump, new connections are made, and existing connections are made stronger. Research shows that the connections that are used over and over grow stronger, whereas those that are used less frequently, grow weaker or disappear.

6. You have decided to do a cooking activity with your group when they awake from their afternoon nap. During naptime, you set up a table outside on the playground with two big bowls containing two different flavors of jello that you've already prepared. You also have spoons and smaller bowls available.

   You gather your afternoon group to go outside. They range in age from 28 to 36 months. As usual, Antonio insists on taking his naptime blanket outside with him, and you allow it.

   As your group walks out to the picnic table, Antonio lags behind the others. You finally take Antonio by the hand and settle him into place at the table beside Kendra, thinking, "Here we go again. Antonio always seems to be my afternoon challenge."

   To get started, you ask the group questions like, "What does jello feel like in your mouth?" and "What colors are these?" Then, you give each child a clean spoon. You dip your clean spoon into the large bowl of green jello, take a bite, and pass the bowl to Sheila. You ask the children to try the jello like you just did. You tell them that after they try the green jello, they may try the red jello.

   Sheila gets the green jello first and then passes it to Antonio. Antonio takes the jello, spoons out some, but then refuses to pass it to Kendra. When Kendra complains, Antonio kicks Kendra saying, "Mine! No like you!" Then, Kendra pushes Antonio. This brings back to mind your childhood memory of the time you kicked your brother at the dinner table. You remember the harsh punishment you received for it. You think to yourself, "Well, it worked! I never kicked my brother again."

- What does Antonio's behavior tell you?

  Suggested Responses: Maybe he is a challenge in the afternoon because he is tired. Perhaps he is not sleeping well during his naps. This may be why he asks to bring his blanket. Maybe Antonio simply cannot use the right words to express himself yet. Also, consider that children of this age are still learning to share. Maybe Antonio does not yet have the capacity to share.

- What area(s) of developmental learning should you try to promote in the future with Antonio based on his behavior?

  Suggested Responses: Social/emotional, communicating, and physical.

- What planned or daily routine activities could you use to support Antonio's individual and developmental needs?

  Suggested Responses: To work around the sharing issue, try to structure this activity differently. For example, next time you might introduce the children to sharing by asking them to share between partners. If there continue to be difficulties, you may spoon the jello into five bowls and ask the children to taste it from their own bowls. Also, provide choices to Antonio as often as possible. Use scheduling to provide a consistent, non-threatening environment for Antonio. Offer him words to help him express his feelings. Build language with one-on-one time and reading. Confirm if Antonio is sleeping properly during naptime and at home, and figure out what might help him. Perhaps a quiet activity before nap would help him settle.

- Can the activities you chose for Antonio be considered "responsive care"? Why?

  Suggested Responses: Yes, because they attend to Antonio's individual needs and promote developmental learning.

- Are there any hurdles to overcome in this situation in order to give responsive care? If so, what are they, and what might help?

Suggested Responses: A hurdle might be your personal belief that the harsh punishment you once received for kicking "worked" because you never kicked your brother again. Focus away from the hurdle and apply the Six T's of responsive care.

7. You are a home care provider. You use developmental activities with the four infants you are assigned each day. This morning, while two of your babies are napping, you decide to work with the other two babies: Brian (four months old) and Vernita (six months old).

   Brian's single mom drops him off each morning at 7:30 a.m. and does not return until 6:30 p.m. Twice per week, she then takes Brian to her mother's home, gets him to sleep, and goes to work at a second job. Vernita has two working parents, who spend all of their non-working time parenting Vernita.

   Today, you plan to focus mainly on the infants' physical skills.

   - How realistic is it to plan activities for infants?

     Suggested Responses: It is realistic and should happen daily. It is important because their brains must develop the connections necessary for future, more complex tasks.

   - What are at least three different physical learning activities that you can work on with this group?

     Suggested Responses: Move colorful toys in front of their eyes. Blow bubbles. Create a crawling course. Go outside on walks and talks. Make noises with different objects. Let them feel different textures.

   - How do the activities you've chosen link to the brain research?

     Suggested Responses: Exposing babies to a variety of sights, sounds, and experiences will help form the connections necessary for future skills. Activities that stimulate all of an infant's senses helps ensure good development. Paying close attention to infants' needs for stimulation as well as quiet time helps them to form secure attachments. With every activity, their brains are growing new synapses—connecting ideas, memories, and experiences.

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8. You have decided to do an activity to promote Brian's and Vernita's physical development.

   You gather several objects from around the room: a ball, a book with large, colorful pictures, a down blanket, and a tambourine. As an afterthought, you also grab a wool sweater you brought from home today. You place the infants and the objects on a thick, comfortable mat in the corner of the room. You lay on your tummy so that your face is at eye level with the children.

   You notice that Brian is very fussy and has difficulty calming himself. You try to shake the tambourine to engage and get his attention, but it only makes him more fussy. You move the ball in front of his eyes, but that doesn't work either.

   Just then, the other two babies begin crying.

   ✌. What developmental activities could you use with the objects listed above to help Brian and Vernita with physical learning? At least one activity must promote physical development because this is what you are focusing on today, but try to list ideas for promoting other developmental areas using these same objects at the same time.

   Suggested Responses: Read the book. Use high and low pitches in your voice as you read. Take turns placing the infants' hands on the book to help turn pages. Shake the tambourine and sing a little song along with it. Lay the sweater and blanket flat on the mat. Rub your face on the blanket and say, "So soft!" Expand on the infants' words if they babble or try to talk back. Rub the children's hands on the blanket. Do this same exercise with the sweater and say, "This is very rough! Ouch!"

   ✌. What does Brian's behavior tell you?

   Suggested Responses: He may have a personality that is naturally fussy and difficult to settle. He may be a baby that is very sensitive to his environment. That is, he is easily upset by loud noises, the texture of his clothes, or bright lights. Because of her own stress and long work hours, Brian's mother may have difficulty soothing his fussiness and responding to him each time he cries.

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- What area(s) of developmental learning should you try to promote in the future with Brian based on his behavior?

  Suggested Responses: Social/Emotional.

- What activities could you use to support Brian's individual and developmental needs?

  Suggested Responses: It will be important to respond to Brian in a patient, consistent manner. Try not to become frustrated or impatient with Brian's fussiness. Talk in a soothing, cheerful voice to Brian. If you cannot get to him immediately, talk to him and let him know you are close by and will come as soon as possible.

- Can the activities you chose for Brian be considered "responsive care"? Why?

  Suggested Responses: Yes, because they attend to Brian's individual needs and promote developmental learning.

- Are there any hurdles to overcome in this situation in order to give responsive care? If so, what are they, and what might help?

  Suggested Responses: The difficulties that Brian's mother is experiencing may affect her care for Brian. You might talk with Brian's mother and find out what you can do to be more supportive. Another hurdle is that the other babies began crying. You can comfort them and bring them into the activity.

5 minutes

Closing

Script

- In Lesson Two, we began talking about responsive care, what it is and what it is not. And we talked about the brain research that tells us why we should provide responsive care.
- In this Lesson, we applied responsive care and the brain research to on-the-job situations.
- I want you to leave training today with this in mind: Use responsive care back on the job during every interaction. Remember to tune in to children's individual needs as well as what they need developmentally. This is the way to build babies' brains.

Display T-3.9, *Goals*.

Script

Let's take a look back at the lesson objectives we started with. Do you think you are now able to

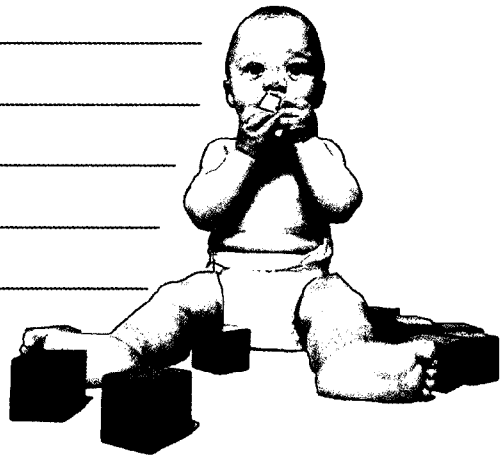
- Define *individual needs* and *developmental needs*?
- Identify messages that children send about their needs?
- Explain the importance of scheduling?
- Choose activities that meet children's individual and developmental needs?

Display T-3.10, *Importance of Your Role.*

Script

- Finally, I want to remind you that you have a very important role in the development of these children. You are often with them more than their own parents, so a great part of their development is in your hands.
- Next, we will talk about how to provide responsive care by structuring the physical environment in *Lesson Four: Does Our Caregiving Environment Promote Responsive Care?*

Notes...



LESSON 4

Does Our Caregiving Environment Promote Responsive Care?

30 Minutes

Lesson Four Checklist

Preparation

- ❑ Make enough copies of H-4.1, *Environmental Needs of Infants and Toddlers,* for all participants.
- ❑ Make enough copies of H-4.2, *Enviro-Assessment,* for all participants.

Materials

- ❑ T-4.1 through 4.6
- ❑ H-4.1, *Environmental Needs of Infants and Toddlers*
- ❑ H-4.2, *Enviro-Assessment*
- ❑ Several full sets of colored markers
- ❑ Masking tape
- ❑ Flipchart paper and stand

What and How	Materials	Time
Introduction **Opening** Read a passage about caregivers caring for infants. Ask participants how their environment affected the care they were able to give. **Goals for the Lesson** Go over the objectives.	T-4.1 through 4.2	2 minutes
Short Lecture **Effects of Environment on Children** **Defining Environment** Explain that physical environment includes the tone, tangible objects, and health and safety factors in the room. **Link to Brain Development** Explain that the environment grows and strengthens neurons in children's brains, just as our interactions do.	T-4.3	2 minutes

TRAINING AT A GLANCE - LESSON 4

What and How	Materials	Time
Activity 4.1 **Environmental Needs of Infants and Toddlers** Participants work in pairs to identify what infants and toddlers need from the environment. Statements containing different infant and toddler needs are given. Participants have to write how they think the environment should be structured to meet the needs. Discuss as a large group.	H-4.1, *Environmental Needs of Infants and Toddlers*	10 minutes
Lecture/Group Discussion **Assessing the Caregiving Environment** **Enviro-Assessment** Introduce the assessment. Go over each of its parts, highlighting certain key points in Part I. **Changes and Work-Arounds** Discuss how to change the environment through work-arounds when full change is not possible. Define work-around as a change or adaptation to the environment that allows caregivers to meet children's same developmental needs. Ask participants to brainstorm some work-arounds for different items on the assessment.	T-4.4 through 4.5 96	10 minutes

What and How	Materials	Time
Activity 4.2 **Does Our Caregiving Environment Promote Responsive Care?** Participants complete Part IV of the assessment (Health & Safety Factors) and share their results. Emphasize that work-arounds are not recommended for health and safety factors—these should be corrected immediately.	H-4.2, *Enviro-Assessment*	15 minutes
Activity 4.3 **Mind Maps** This activity is a fun way to help participants connect the concepts covered in this lesson to key concepts covered in previous lessons. Participants work in small groups to complete a mind map, with "environment" in the center and related concepts on the arms, such as responsive care and brain research. Begin the mind map on the flipchart to show participants how to build it. Participants should then expand it from there. Hang them across a wall when everyone is done. Participants will get to view each others' work at the end of training.	• 10 blank sheets of paper • 11 full sets of colored markers • Wall tape • Flipchart paper and stand	20 minutes
Closing Review the lesson objectives and ask participants if they feel they've achieved them. Refer to the extra Resource Materials on environment.	T-4.6	1 minute
97		**Total: 1 Hour**

2 minutes

Introduction

Does Our Caregiving Environment Promote Responsive Care?

Opening

Display T-4.1, ***LESSON 4: Does Our Caregiving Environment Promote Responsive Care?***

Read the following passage verbatim.

Script

Next we're going to talk about the physical environments where we care for children. We will see in this lesson that our environment affects responsive care.

Now picture this and think about the environment as I read: Miss Katy and Miss Martha are working in the infants' room with six infants. Miss Martha leaves the room to get the baby bottles from the refrigerator and, wouldn't you know, two of the infants wake up crying as soon as she leaves. Miss Katy knows she needs to provide responsive care right away so that the crying infants will feel secure and trusting. She does her best until Miss Martha returns.

In this scenario, did the physical set up of the infants' room affect caregiving? How?

Suggested Responses: Yes. If there had been a refrigerator in the room, Miss Martha would not have had to leave, and each infant would have had immediate responsive care upon waking up.

Goals for the Lesson

Display T-4.2, *Goals.*

Script

In this lesson, we're going to talk about the physical caregiving environment and how it affects the responsive care we give. By the end of this lesson, you will

- Explain how to make the environment meet the needs of infants and toddlers.
- Assess your environment and describe the changes you should make.

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2 minutes

Short Lecture

Effects of Environment on Children

Defining Environment

Display T-4.3, *Physical Environment.*

Script

What do we mean by physical environment? When we say *physical environment,* we mean the

- Feel/tone of the room
- Physical elements (lighting, ventilation, layout, materials, fixtures, furniture)
- Health and safety factors

These elements of the physical environment should allow you to provide the most responsive care possible so that children are free to develop to their potentials.

Link to Brain Development

Script

Just like the interaction you have with children, the environment plays a key role in developing a child's brain. The tone of the room, how the physical parts of the room are arranged, and the health and safety of the room all make neurons grow and strengthen.

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FULL SCRIPT - LESSON 4

15 minutes

Activity 4.1

Environmental Needs of Infants and Toddlers

Materials
H-4.1, *Environmental Needs of Infants and Toddlers*

Preparation
Make enough copies of H-4.1 for all participants.

Key Points
It is important to set up the environment to meet the needs of children and help us provide responsive care. The way the environment is arranged contributes to children's brain development.

Directions
1. Ask participants to work in pairs.
2. Distribute H-4.1, *Environmental Needs of Infants and Toddlers.*
3. Ask participants to complete the worksheet with their partners.
4. Debrief by discussing the answers with the large group.
5. Conclude by emphasizing how structuring or setting up the environment is important for providing responsive care.

Suggested Responses—Infants

Infants require a lot of face-to-face contact, touch, and personal contact with their caregivers. What are the environmental implications?

Suggested Responses: Structure diapering, sleeping, and play areas to be quiet, and structure many places for holding infants.

Infants spend most of their time looking at ceilings, walls, and lights. What are the environmental implications?

Suggested Responses: Ensure that ceilings, walls, and lights are not too bright. Provide colorful and interesting objects for children to look at. For

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example, hang mobiles or toys for children to see. Make sure pictures and mirrors are at children's eye level.

- Infants explore the world by placing objects in their mouths. What are the environmental implications?

  Suggested Responses: Ensure there are no small objects accessible to infants that could fit in their mouths. Use low-pile carpet so that small objects cannot hide. Ask parents to provide teething items appropriate for putting in their mouths. Clean toys on a regular basis.

- Infants like to practice body movements while lying down. What are the environmental implications?

  Suggested Responses: Ensure there are firm, cushioned surfaces for infants to lie down on. Offer a variety of levels that allow infants to practice crawling or scooting from one to the next.

- Infants require constant monitoring. What are the environmental implications?

  Suggested Responses: Children should be visible from all areas of the room.

- Ask volunteers how their own caregiving environments "stack up" and what areas could be improved. If participants comment that they do not have the resources available to make the needed changes, tell them that we will discuss the issue of how to make changes in a few minutes. For now, they should think about what should change.

Suggested Responses - Toddlers

- Toddlers are beginning to experience peer play and social conflicts. What are the environmental implications?

  Suggested Responses: Provide toys that promote social opportunities, such as double slides or two side-by-side rocking horses. Also, provide more than one of any given popular toy to discourage sharing conflicts.

- Toddlers are beginning to express themselves creatively and play fantasy games. What are the environmental implications?

  Suggested Responses: Provide toys that promote dress-up and fantasy.

- Toddlers like their products displayed. What are the environmental implications?

  Suggested Responses: Allow wall space to display their work.

- Toddlers are within the critical window for large muscle physical development. What are the environmental implications?

  Suggested Responses: Provide open spaces for large muscle activity, such as jumping, running, and climbing.

- Toddlers sometimes do not consider the needs of younger children. What are the environmental implications?

  Suggested Responses: Use physical barriers to avoid mixing infants with toddlers, without reducing visibility.

- Ask volunteers what could be improved in these areas of their own caregiving environments. If the issue of resources arises, again tell participants that this issue will be addressed shortly.

Emphasize how structuring the environment is important for providing responsive care.

Script

How does structuring the environment help you to provide responsive care?

Suggested Responses: Structuring the environment properly helps us to support the learning taking place at each stage.

10 minutes

Lecture/Group Discussion

Assessing the Caregiving Environment

Enviro-Assessment

Distribute H-4.2, *Enviro-Assessment.*

Script

This is a four-part assessment of your caregiving environment. It lists all of the factors that should be incorporated into your caregiving environment. Many of the items on this assessment are factors that we just discussed in Activity 4.1. You will be completing this assessment in a few moments. But first, let's overview its four parts. NOTE: If there any family child care providers in the audience, ask what changes or additions need to be made to the assessment to fit their particular needs.

Part I

Display T-4.4, *Part I: Key Points.*

Briefly overview all sections of Part I. Highlight the following key points.

Script

In Part I (on page 1), I'd like to draw your attention to a few key factors:

- Lighting is best if at least partially natural. Natural light from open windows brings in all of the colors from sun rays and is the best. Lamps are also good light sources because they create a homey atmosphere. Fluorescent lights, on the other hand, have been proven to be a drain on one's immune system and can cause headaches.
- Ventilation should be accessible from the outside. Fresh air is important because increased oxygen stimulates children's brains. Plants help bring natural oxygen into the room and remove pollutants. Place as many real plants in your caregiving environment as possible, however, make sure the plants you choose are non-poisonous.

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- Play materials should be in wide variety. There should be materials appropriate to a range of ages because we all know that children vary developmentally. There also should be duplicates of materials to allow for parallel play and reduce behavior problems.
- Fixtures must be adapted for the needs of children. That is, all furniture must be child-sized and storage for children's materials must be accessible to children.
- Recommended colors for classrooms are: blues, greens, light pinks, rose, lavender, purple, peach, brown, some white, small touches of black. Colors that are not recommended include red, orange, yellow, hot pink, and chartreuse because they can be overstimulating.

Parts II through IV

Highlight the three remaining parts.

Script

- Part II (page 3) lists the factors to consider for each indoor center in your class or home. Basically, the equipment and the storage for the equipment should all be adequate. Also, your environment should allow for all of these learning centers, whether permanently or rotated. If it does not, score these areas with a low score of 1.
- Part III (page 6) lists the important factors to consider outdoors.
- Part IV (page 7) lists the health and safety factors that must be in place.

Changes and Work-Arounds

Discuss how to change the environment as needed or through work-arounds.

Script

We will take part of this assessment in a moment. But, back on the job, you should take the whole assessment and determine what changes should be made to provide better responsive care. How should you make changes if you do not have the resources to make the changes needed?

Suggested Responses: Think of "work-arounds."

Display T-4.5, *Work-Arounds.*

Script

"Work-arounds" are defined as changes or adaptations to the environment that allow caregivers to meet children's same developmental needs.

Ask participants to brainstorm some work-arounds for different factors on the assessment.

Script

If you do not have the resources to install low windows so that children can see out from the class, what are some work-arounds?

Suggested Responses: Spend time each day holding children by the window. With toddlers, you can play "I Spy."

If you do not have the resources to build half walls to facilitate noisy vs. quiet areas, what are some work-arounds?

Suggested Responses: Use structures that you have available to divide the room, such as couches or toy shelves.

If you cannot control the thermostat in the building and it is always too chilly, what are some work-arounds you can use?

Suggested Responses: Supply sweaters and sufficient numbers of blankets for the children.

15 minutes

Activity 4.2

Does Our Caregiving Environment Promote Responsive Care?

Materials

H-4.2, *Enviro-Assessment*

Preparation

Make enough copies of H-4.2 for all participants.

Key Points

Participants should assess their caregiving environments and make the changes as needed.

Directions

1. Ask participants to complete Part IV – Health & Safety Assessment according to their best recollection about their work environments.
2. Emphasize that, on the job, the whole assessment should be completed. For time's sake, we are doing only part of it here.
3. Tell participants that they will share their results in a moment.
4. Once they have completed Part IV of the assessment
   - Ask if anyone checked "no" to any of the items.
   - Emphasize that work-arounds aren't recommended for health and safety factors. If scored low, these should be changed/improved immediately so that every factor receives a high score of 3.

FULL SCRIPT - LESSON 4

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15 minutes

Activity 4.3: Closing

Mind Maps

Materials

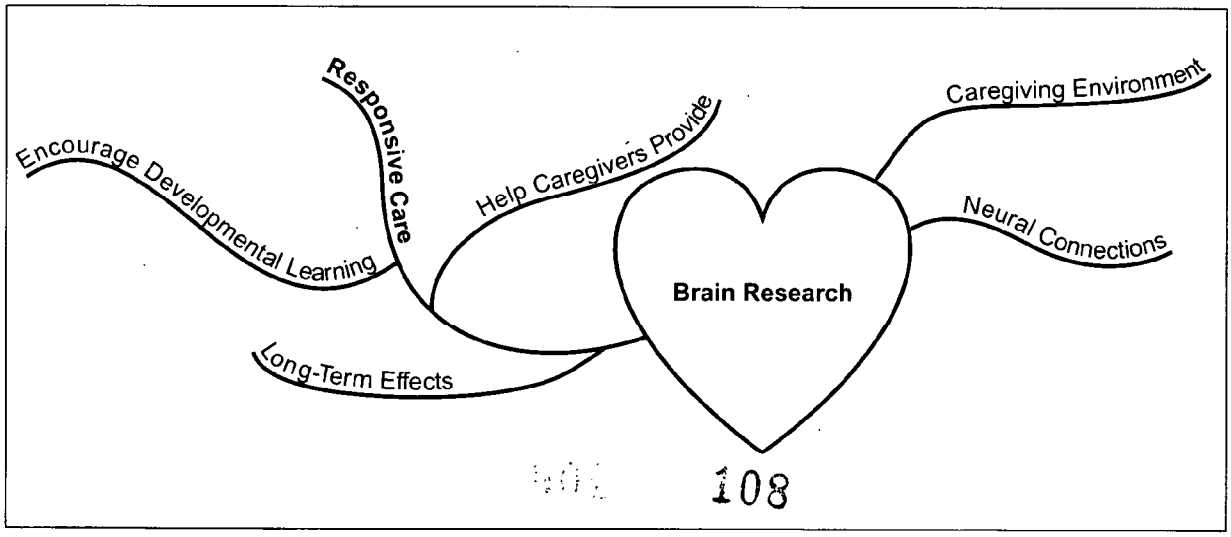
- Several full sets of colored markers
- Masking tape
- Flipchart paper and stand

Key Points

All of the concepts discussed in training today tie together and relate to each other. Everything talked about today should help us to provide better responsive care on the job.

Directions

1. Ask participants to break into groups of three.
2. Explain that you would like them to complete a mind map showing how the caregiving environment relates to the other concepts we've learned throughout training.
3. Explain that the purpose of a mind map is to connect different ideas. Drawing a mind map is a free-flowing activity. You document whatever comes to mind. There are no right or wrong answers.
4. Explain how to draw a mind map by beginning one on the flipchart that they should copy and complete. See the Sample Mind Map below.



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Explain the following as you draw:

- Begin with the main subject in the center surrounded by a heart. Make this any color you'd like.
- Draw a curved line coming out from the center for each subject you'd like to relate to the center subject. Each of these lines should be a different color. In this case, I'd like you to draw two different colored lines coming from the center which read: Responsive Care and Caregiving Environment.
- From each of these lines, draw other sets of lines to relate anything that comes to mind about how responsive care or environment relates to brain research. For example, from the Responsive Care line, we might draw additional lines that say, "helps caregivers provide," "encourages developmental learning," and "long-term effects."
- From the center with Brain Research, we might draw a line that says, "neural connections."
- Keep these lines either the same color or make them different—whichever helps you visualize how all of the concepts relate to each other.
- Use short one-to-three-word phrases and abbreviate.
- Then, draw lines from each of these lines by relating anything that comes to mind about the subject.
- Copy the mind map I've begun and expand upon it.
- There are no right or wrong answers. Just be creative!

5. Distribute one blank sheet of chart paper and colored markers to each group.
6. Ask participants to post the chart paper on the wall and copy the mind map you've begun. Encourage participants to use their creativity and expand upon what you've started.
7. Allow ten minutes for participants to complete their mind maps.
8. Thank participants for their good work. If time permits, ask volunteers to share and explain their ideas. Conclude by saying that the mind maps have provided an opportunity to see how responsive care fits with the brain research and information about the environment.

1 minute

Closing

Script

- In previous lessons, we talked about responsive care.
- As we saw in this lesson, how the environment is arranged is part of responsive care and affects the brain's development just like your interaction does.
- I hope that you will go back to the job after training and take some time to complete the rest of the *Enviro-Assessment*. Discuss the assessment with the other caregivers and make the changes needed for the sake of your children.
- Also take some time after class to review the yellow Resource Materials. These provide more detail about how to structure the caregiving environment.

Display T-4.6, *Goals*.

Script

How do you feel about what you learned in this lesson? Are you now able to

- Tell others how to make the environment meet the needs of infants and toddlers?
- Assess your environment and describe the changes you should make?

Script

Let's do one more activity to wrap up the day. In *Lesson Five: Training Conclusion,* you will make some commitments to use the information you learned here today back on the job.

110

LESSON 5

Training Conclusion

30 Minutes

Lesson Five Checklist

Preparation

- ❑ Determine how many Post-It-Notes to give each participant in class so that the total given will equal approximately 100. For example, if there are ten participants in class, give each person ten Post-It-Notes. If there are 30 participants in class, give each three Post-It-Notes.
- ❑ Choose a wall onto which you can tape the mind maps and Post-It-Notes without damaging the wall.
- ❑ Post a flipchart labeled "Wall of 100 Commitments," onto the wall as the name of the wall.

Materials

- ❑ Post-It-Notes
- ❑ Flipchart
- ❑ Masking tape
- ❑ Markers

What and How	Materials	Time
Final Activity 5.1 **Wall of 100 Commitments** This activity will help participants bring everything they've learned in training back to the job. Explain that during the mind map activity, they looked back on everything they learned. In this activity, they will look towards the future. Participants should record onto Post-It-Notes what they will commit to doing differently back on the job as a result of this training. Then, they should stick their Post-It-Notes onto a wall labeled on flipchart paper, "The Wall of 100 Commitments." While they are sticking, they should take a few moments to view each others' mind maps from the last activity. Participants return to their seats for the training's conclusion. Ask volunteers to read sections of the wall and relate their commitments to the Six T's, the brain research, improving the environment, and the goals of training. Finalize by noting how committed the group is and thanking participants for their participation today. Remind them that, if they could, their children would thank them, too. 113	• Post-It Notes • Flipchart • Markers	30 minutes

30 minutes

Final Activity 5.1

Wall of 100 Commitments

Materials

- Post-It-Notes
- Masking Tape
- Flipchart and markers

Preparation

- Determine how many Post-It-Notes to give each participant so that the total given will equal approximately 100. For example, if there are ten participants in class, give each person ten Post-It-Notes. If there are 30 participants in class, give each three Post-It-Notes.
- Choose a wall onto which you can tape the mind maps and Post-It-Notes without damaging the wall.
- Post a flipchart labeled, "Wall of 100 Commitments," onto the wall as the name of the wall.

Directions

1. Introduce the activity using the script below.
   - You have learned a lot in training today. The last exercise, mind mapping, helped you to reflect on everything you've learned.
   - Now take some time to think about the future. How are you going to use everything you've learned back on the job? What will you "commit" to doing?
   - I'm going to pass out some Post-It-Notes to each one of you. On each Post-It-Note you are given, please record one thing you commit to doing differently back on the job as a result of this training. It might be simply information you will remember or it might be an activity that you will actually do differently. You may write whatever you will do differently as a result of this training.
   - When you are done, stick your Post-It-Notes onto this wall. This is the Wall of 100 Commitments.
   - After sticking your Post-It-Notes, take some time to review everyone else's mind maps.

- When you have finished, return to your seats.

2. While participants are working on their commitments, tape each mind map from Activity 4.3 in scattered fashion across the entire "Wall of 100 Commitments."
3. Ask three or four different participants to read sections of the wall out loud to the class until all commitments have been read. As the commitments are read, relate as many as possible to anything that has been covered in training today, including:
   - Six T's of responsive care:
     - Tuning in
     - Teaching
     - Time
     - Talk
     - Touch
     - Trust
   - Brain research
   - Improving the environment
   - Goals of training
   - Other topics covered in training today
4. Conclude the training by commenting that this is a very committed group! Thank the group for their future commitments and participation in today's training.
5. Remind them that, if they could, their children would also thank them for helping them develop in the best possible way!

Notes...

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Shore, Rima. (1997). *Rethinking the Brain: New Insights into Early Development*. New York: Families and Work Institute.

Sylwester, R. (1995). *A Celebration of Neurons: An Educator's Guide to the Human Brain*. Alexandria, VA: Association for Supervision and Curriculum Development.

Additional Resources

Children's Defense Fund
25 E Street NW
Washington, DC 20001
(202) 628-8787
www.childrensdefense.org

WestEd, Center for Family & Child Studies
Program for Infant/Toddler Caregivers
180 Harbor Drive, Suite 112
Sausalito CA 94965-1410
(415) 289-2314
www.wested.org

National Association for the Education of Young Children (NAEYC)
1509 16th Street, NW
Washington, DC 20036
(800) 424-2460
www.naeyc.org

ZERO TO THREE: National Center for Infants, Toddlers, and Families
74 15th Street, NW, Suite 1000
Washington, DC 20005
(202) 638-1144
www.zerotothree.org

Handouts

Handout 1.1

Suggested Agenda

8:00 – 8:30	**Breakfast**
8:30 – 9:30	**Lesson 1:** Training Welcome and Overview
9:30 – 11:30	**Lesson 2:** What Is Responsive Care, and Why Should I Provide It?
11:30 – 12:30	**Lunch**
12:30 – 1:30	**Lesson 3:** How Can I Provide Responsive Care?
1:30 – 2:30	**Lesson 4:** Does Our Caregiving Environment Promote Responsive Care?
2:30 – 3:00	**Lesson 5:** Training Conclusion

Handout 1.2

A Letter from Jamey

Directions: Think ahead to the year 2025. You go out to your mailbox and find the letter below. You are surprised: it's a letter from a child you cared for over 20 years ago! Read this letter now.

January, 2025

Dear (insert your name):

I don't know if you remember me, but I was a child in your child care group over 20 years ago. I'm writing to you after all these years to thank you for your help way back then. Your care has helped me to go far in life (even though my parents remind me of all the great traits I've inherited from them!).

When I was in your care, you helped me learn to play nicely with others, speak with lots of different words, kick a ball, and do many other things. My parents tell me you used to talk with them about my behaviors everyday. Together, you'd figure out what I was trying to tell you and come up with a plan for helping me develop in all the right ways. As my mom says, you were very "responsive."

I've come a long way since then. I put all those words you taught me to good use by becoming a reading teacher. I also head up the school newspaper. It's a lot of work, but I can really depend on the staff, and we all get along great. In my spare time, my greatest passion is playing soccer. And above all, I am happy and look forward to the future.

Thank you, (insert your name), for helping to lay such a strong foundation for my life. I think it's made everything since then just a little bit easier for me.

With gratitude,

Jamey

Handout 2.1

Responsive Care Example

Directions: Read the following example while the trainer reads it aloud.

You are outside on your daily fresh air break with two infants. Today, you had planned to sing songs and play puppets with them in the fresh air. Robin, one of the infants, seems to get very cranky outdoors, so you know your time is limited.

You sing the songs and use the different puppets to give them each kisses. Andrew giggles with joy whenever you use the furry puppet, so you use that one when singing to him especially.

Just then, Robin begins shaking her head from side to side and waving her hands and feet. You know within moments she will begin crying if you do not go back inside.

You tell Robin that you know she wants to go inside now. You pack up the puppet show and children to go back inside. Once back inside, you pick up where you left off and keep playing puppet show.

Handout 2.2

Results of Your Care

Directions: Read how your responsive care and unresponsive care can affect children's lives.

Results of Responsive Care

- Children get along better with others in life.
- There's a better chance that children who experience abuse growing up won't abuse others when they get to be adults.
- Children do better in school.
- Children have fewer behavior problems.
- Children can handle stress and shock better in life.
- Children have greater self-esteem and like themselves when they are adults.
- Children understand other people better in life.
- Children can solve problems better in life.

Results of Unresponsive Care

- Children can't learn as easily in the future.
- Children have more emotional problems in life.
- Children feel threatened more easily.
- Children are quicker to respond with aggression.
- Children can't concentrate as well.
- Children are more anxious throughout life.
- Children are more depressed in life.
- Children have more health problems in life.
- Children's brains are sometimes smaller compared to other children their age.
- Children are more likely to experience problems with language and reading.
- Children don't get along with others very well in life.
- Children are more likely to be addicted later in life.
- There's a better chance that children will be in an abusive relationship later in life.

Handout 2.3

Neural Connections

Directions to Trainer: Cut along the dotted lines to prepare for this activity.

Handout 2.3: Neural Connections

Johnny had a hard time parting from his parents and then eventually learned to trust other caregivers. This is an example how Johnny learned to attach, which is mainly a part of _____.

(a) Social/emotional development
(b) Thinking/communicating development
(c) Physical development

1

Handout 2.3: Neural Connections

Amy once had a hard time sharing, but eventually she learned to share with her caregivers' help. Each time her caregivers taught her about sharing, Amy's brain cells actually formed neural connections with _____.

(a) Other organs
(b) Other people
(c) Other brain cells

2

Handout 2.3: Neural Connections

As a child, Leon saw his parents yell and fight to solve problems. Eventually, Leon connected fighting with solving problems. Fortunately, the brain doesn't stop growing and learning at age 12. Leon's brain will continue growing _____.

(a) Until he is 21
(b) For the rest of his life
(c) Until he is done with school

3

Handout 2.3: Neural Connections

While diapering Keisha, you saw her smile for the very first time. You then began smiling and talking baby talk with Keisha every time you diapered her—especially when she smiled. Now, Keisha smiles all the time. What happened in her brain is that her brain cells "talked" to each other and she learned about smiling. The terminals of some of her brain cells released chemicals to _____.

(a) Dendrites of other brain cells
(b) Terminals of other brain cells
(c) Cell bodies of other brain cells

4

Handout 2.3: Neural Connections

Miss Debby would point out objects to Brooke in books, and then Brooke eventually said them. Brooke's brain cells communicated with other brain cells to make her learn. The chemicals that Brooke's brain cells used to talk to each other are called _____.

(a) Synapses
(b) Neurotransmitters
(c) Axons

5

Handout 2.3: Neural Connections

Dale could not name his numbers in order from one to ten, but eventually he was able to name each number. **If no one had ever helped Dale with his numbers**, the brain cells responsible for math would have eventually _____.

(a) Grown
(b) Lived
(c) Died

6

Handout 2.3: Neural Connections

Manuel had almost no hand control and now has a strong grip. This is an example of _____.

(a) Physical development
(b) Emotional development
(c) Language development

7

Handout 2.3: Neural Connections

I've watched Chris make progress towards walking: moving, rolling over, up on knees, rocking, pulling up, and finally stepping. This is an example of _____.

(a) Emotional development
(b) Physical development
(c) Language development

8

Handout 2.3: Neural Connections

I've watched Anna make progress in her ability to pull her head up, look around, sit up by herself, and hold her own bottle. This is an example of two types of physical development: gross motor skills and _____.

(a) Fine motor skills
(b) Social attachment skills
(c) Thinking/communicating skills

9

Handout 2.3: Neural Connections

I have watched Donna go from holding a crayon to scribbling. Someday, she will be able to draw complete pictures with clear objects. This is an example of Donna's physical learning as well as her _____.

(a) Social/emotional development
(b) Mental/psychological development
(c) Thinking/communicating development

10

Handout 2.3: Neural Connections

The most critical window for social attachments begins between six and eight months. Some of the best ways to help children develop healthy social attachments is through appropriate touch and by helping them to _____.

(a) Trust caregivers
(b) Build fine motor skills
(c) Use language

11

Handout 2.3: Neural Connections

As an adult, learning continues. The structure that was set in the brain during ages birth to 12 _____.

(a) Can never be changed once it is set
(b) Can be changed through experience
(c) Can only be changed before age 21

12

Handout 2.3: Neural Connections

The Six T's of Responsive Care are:

(a) _____
(b) _____
(c) _____
(d) _____
(e) _____
(f) _____

(Throw the yarn to each person who can name one of the T's if one person cannot think of all of them.)

13

Handout 2.3: Neural Connections

You can achieve the goal of giving responsive care to children each and every time you interact with them by applying the Six T's, assigning primary caregivers, and _____.

(a) Being attentive only to those who need it most
(b) Promoting developmental learning with some children
(c) Overcoming hurdles to responsive care

14

Handout 2.3: Neural Connections

When you play music at certain planned times of the day, you are doing a planned activity. When you expand upon what children say to help them learn to talk, you are doing an activity that can be used during daily _____.

(a) Routines
(b) Homework
(c) Planned outings

15

Handout 2.3: Neural Connections

Placing favorite toys in different parts of the room and asking a group of children to find them and bring them back to you is a way to help them develop in the following areas: physical, thinking/communicating, and _____.

(a) Social/emotional
(b) Teaching
(c) Tuning in

16

Handout 2.3: Neural Connections

A child is not sharing his toys well with his playmate. If you say to the child, "Share that toy with your playmate!," this is unresponsive because it is not using one of the most important T's of responsive care: _____

(a) Training
(b) Teaching
(c) Translating

17

Handout 2.3: Neural Connections

Pretending that an infant is "telling you" something when she gurgles helps with physical and social/emotional development, but is also a way to help the infant's _____.

(a) Gross motor skills
(b) Bonding and attachment
(c) Thinking and communicating

18

Handout 2.3: Neural Connections

Our goal is to give responsive care to every child _____ .

(a) Some of the time
(b) Every single day
(c) When it's convenient

19

Handout 2.3: Neural Connections

Last week, I was tired and running out of patience with the children. To help overcome this hurdle to giving responsive care, I focused on applying the Six T's: Tuning in, Teaching, Touch, Time, Talk, and _____.

(a) Training
(b) Translating
(c) Trust

20

Handout 2.3: Neural Connections

Scientists can see where activity is happening in a brain by using a _____.

(a) JET scan
(b) PET scan
(c) NET scan

21

Handout 2.3: Neural Connections

We are born with over 100 billion brain cells and over 50 trillion connections between them. How these connections are set up at birth depends on our genes, which are _____.

(a) Inherited from our parents
(b) Developed through experience
(c) Learned at child care

22

Handout 2.3: Neural Connections

If you're a caregiver and you read a lot to a child, what you'll see is more connections in the language part of her brain. This is because this area of her brain is being used a lot. The more you read to children, the higher their language skills will be. The less you read to children, the lower their language skills will be. This is an example of the _____.

(a) "Use it or lose it" principle
(b) "Less is more" principle
(c) "Risk is not destiny" principle

23

Handout 2.3: Neural Connections

If you're a caregiver and you respond right away to a small infant's cries by picking him up and taking care of his needs, then the infant will actually grow neural connections in his brain. The area of the brain most affected will be his _____.

(a) Social/emotional area
(b) Thinking/communicating area
(c) Physical area

24

Handout 2.3: Neural Connections

The definition of responsive care is: being attentive to the individual and developmental strengths and needs of each child, responding in a way that promotes learning in at least one developmental area, and using the Six T's _____.

(a) As necessary
(b) Whenever possible
(c) Every day

25

Handout 2.3: Neural Connections

Tuning in to children means really watching their behavior and _____.

(a) Ignoring babble
(b) Listening to them
(c) Writing it down

26

Handout 2.3: Neural Connections

Teaching means that during each interaction, you should do activities that promote at least one _____.

(a) Developmental area
(b) Annual goal
(c) School subject

27

Handout 2.3: Neural Connections

If an infant cries and no one attends to him, this is an example of _____.

(a) Responsive care
(b) Unresponsive care
(c) Trust building

28

Handout 2.3: Neural Connections

Each time you interact with a child, new brain cell connections form and those that are already there become _____ .

(a) Weaker
(b) Stronger
(c) Lighter

29

Handout 2.3: Neural Connections

Children who have had responsive care tend to handle stress better in life, while those who have had unresponsive care are more likely to have _____.

(a) Emotional problems
(b) Healthy relationships
(c) Better school performance

30

Handout 3.1
Activities Matrix

This matrix lists some sample ideas for responsive care activities with infants and toddlers. It is organized by learning type and age group. NOTE: Activity choices should take into account children's individual needs as well as the typical developmental needs listed in this matrix.

SOCIAL/EMOTIONAL

Sample Learning Activities for *Infants* (Birth to 12 months)

What Can Infants Do?	What Are Infants Working On?	*Planned* Activities That Help Meet Infants' Needs	*Daily Routine* Activities That Help Meet Infants' Needs	How Activities Link to Brain Research
Show interest in other people React to strangers with anxiety Show discomfort when separated from mother Become comforted by familiar people Show affection for familiar people Express a variety of emotions: joy, sadness, pleasure, anxiety, anger Show dislike when a familiar toy is removed	Developing a close, trusting relationship with caregiver(s) Recognizing familiar faces Feeling that the world is a secure, safe place to be	Sequence activities and routines consistently for each child, but remain flexible to meet individual needs as children grow and change. Assign a primary caregiver to each child. Let infants 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. Play social games such as Pat-a-Cake or Peek-a-Boo. Schedule outdoor time.	Move in quickly to comfort infants when they are distressed. You can rock, sing, or walk with them to soothe them. Do not rush children to say goodbye. Go slowly. Allow children to bring objects for comfort, such as stuffed animals or blankets. In the morning, greet parents and children warmly. Find out how children slept and ate. When diapering or dressing/ undressing children, learn to accept their feelings. For example, "I know that you are ready to play, but we'll be finished in a minute." Encourage cooperation. For example, say, "I've pulled your sock halfway off. Can you pull it the rest of the way?" Ensure that infants sleep in their own crib or bed and that it is located in the same place every day. Let infants know that you think each one is special and fun to be with.	Touching, holding, and playing simple social games with infants helps them to develop healthy attachments, as well as a sense of trust. Children learn that their needs will be taken care of because their brains form an association over and over between having needs and getting them met. Familiarity and predictability are important elements in helping infants form trust. When daily routines and rituals are carried out in a consistent, timely way, children learn basic trust in the world around them.

SOCIAL/EMOTIONAL

Sample Learning Activities for *Young Toddlers* (12 to 24 months)

What Can Young Toddlers Do?	What Are Young Toddlers Working On?	*Planned* Activities That Help Meet Young Toddlers' Needs	*Daily Routine* Activities That Help Meet Young Toddlers' Needs	How Activities Link to Brain Research
Show increased interest in peers Recognize self in mirror and smile Show sense of self by insisting on doing things their way Demonstrate trust in adults Play alone Recognize changes in daily routines Understand what is theirs Select one activity out of several options Demonstrate trust in adults	Playing and getting along with peers Separating and reconnecting with important caregivers Exploring and experimenting with the world around them Recognizing themselves as separate people with separate wants and needs Becoming more independent, while they still feel the need for close caregivers for security	Schedule daily activities, and stick to the schedule to provide consistency and security for children. Assign a primary caregiver to each child or groups of children. Collect pictures of children at home and in the classroom. Cover pictures with clear contact paper and hang low on the wall, over changing tables, or near cribs. Offer specific choices in activities and foods. Set up a mirror for you and the children to sit in front of. Point out body parts and demonstrate different emotions. Provide unhurried times when toddlers can play by themselves, in uncrowded spaces. Schedule outdoor time.	Share with parents what has happened with their children that day or night during greetings and departures. Place items that children use from home (e.g., nap blankets, sleeping toys, toys for sharing, family pictures) in a cubby that is for that child only. Give one-to-one attention to every child as often as possible. Offer choices for free-time activities.	The critical window for forming attachments to caregivers is between eight and 25 months. Constant stress affects brain development. Children learn best when they feel safe and secure. Early care has long -lasting effects on social and emotional well-being.

SOCIAL/EMOTIONAL

Sample Learning Activities for *Older Toddlers* (24 –36 months)

What Can Older Toddlers Do?	What Are Older Toddlers Working On?	*Planned* Activities That Help Meet Older Toddlers' Needs	*Daily Routine* Activities That Help Meet Older Toddlers' Needs	How Activities Link to Brain Research
Show strong sense of self as an individual; assert independence Be aware of feelings (their own and others') Shows concern for others Enjoy playing and exploring with peers Use names of self and others	Being self-sufficient by mastering tasks such as feeding and dressing Conforming to social rules and developing a sense of belonging to the group Sharing and displaying appropriate behaviors in place of aggression Pretending and using fantasy play Recognizing that certain activities take place at certain times Moving from one activity to the next Following requests	Schedule daily activities, and stick to the schedule to provide consistency and security for children. Support individuality by providing choices whenever possible. Provide opportunities for sharing, caring, and helping such as, making cards for a sick child or a teacher. Care for pets. Use materials/equipment that encourages cooperation and social play, such as puzzles, dress-up clothes, or double slides. Use children's names in songs or games. Display children's artwork and photos of the children and their families at children's eye level. Play make-believe with toddlers. Pretend you're on the phone or shopping and have a conversation. Assign a buddy to do social activities with. Schedule outdoor time.	Support individuality by providing choices whenever possible during daily routines. For example, you could say, "You have to change your shirt, but you can choose the red one or the blue one." Provide a transition activity between active play and sleep to help children settle down. Children should have cots or bedding that belong to them. Encourage them to bring a special blanket or toy when they nap as part of their routine or napping ritual. Help children develop responsibility by asking them to help with "clean-up." Provide toddler-sized cleaning tools such as a small broom. Offer words and encourage children to use those words to express feelings and resolve conflicts. Make up silly rhymes, like "the bed is on your head!" and ask silly questions to which the answer is "no" (which is their favorite word) such as, "Is there a duck on your head?" Allow reading when children ask so they realize you think it's important.	Activities that encourage cooperation and provide children with opportunities to assert their independence help children to combat feelings of stress and develop a sense of confidence and control. Daily routines and rituals associated with positive feelings are reassuring to children and help them know what to expect from the environment. These repeated experiences help form strong connections in the brain.

THINKING/COMMUNICATING

Sample Learning Activities for *Infants* (Birth to 12 months)

What Can Infants Do?	What Are Infants Working On?	*Planned* Activities That Help Meet Infants' Needs	*Daily Routine* Activities That Help Meet Infants' Needs	How Activities Link to Brain Research
Cry to signal pain or distress Respond to voices Babble using different sounds Combine some sounds Respond to their own names Use special cries for hunger or discomfort Watch a speaker's face, eyes, lips, and mouth Listen to a speaker for increasing periods of time Say their first words	Communicating their needs using sounds, facial expressions, and movements Making connections between what the caregiver is saying and what they are experiencing	Sing songs such as "This Little Piggy" and "Twinkle, Twinkle Little Star." Use different voices (i.e., high-pitched voice, whisper) while singing these songs. Share books with large, colorful pictures. Talk with infants about what you see. Schedule outdoor time for singing and reading.	Be attentive to infants' cues and respond quickly to their needs for food and comfort so they know their communication is working. Repeat cooing and babbling sounds back to infants to help them learn that sounds have a purpose. During diapering, give close attention to children. Talk to them about what you are doing (e.g., "First, I'm going to unsnap your pants, then that dirty diaper comes off...") As you are talking, let infants touch your face and feel your mouth move. Make different sounds so they can feel the changes. Hold infants and talk to them for bottle-feeding. Let infants know that you think each one is special and fun to be with. As infants begin to talk, expand on what they are saying. For example, if they use one word, you should expand into two, three, or four words.	Mimicking the infant's sounds, introducing new words and songs, and sharing interesting books help to create an environment that is rich and stimulating, which, in turn, helps to form the connections necessary for language development. Children learn best in the context of a safe, caring environment. Providing special, one-on-one attention to each child, every day, is essential for developing strong thinking and communication skills.

THINKING/COMMUNICATING

Sample Learning Activities for *Young Toddlers* (12 to 24 months)

What Can Young Toddlers Do?	What Are Young Toddlers Working On?	*Planned* Activities That Help Meet Young Toddlers' Needs	*Daily Routine* Activities That Help Meet Young Toddlers' Needs	How Activities Link to Brain Research
By 24 months, toddlers understand 50–100 words, speak using approximately 25-50 words, and speak in two-to-three word utterances Use the words "me," "you," and "I" often Use vocal signals other than cries to gain assistance Respond to a verbal request Repeat overheard words, and imitate what you and others do Recognize many objects by name, and name objects they want Classify objects as the same Show interest in the environment around them and converse about it Explore cause and effect Look for things when they are out of sight	Expanding vocabulary Expressing themselves in ways that are understood by others Understanding opposite concepts such as "cold vs. hot" or "big vs. small" Reasoning and problem solving activities Recognizing and sharing thoughts and feelings	Use simple but grammatically correct sentences. Take "word walks" around the room, pointing and naming objects of interest. Also, do this outdoors. Read simple, short stories when toddler is quiet and alert. Remember that a toddler likes to hear the same story many times. Write down toddler stories and label their drawings. Sing songs and familiar nursery rhymes. Read to children daily. Play classical music during naptime and when children are dancing. Play "Simon Says." Have the child follow simple directions, "Show me your nose" or "Give me a diaper."	Put an aquarium with fish or hamsters in your room, or hang a birdfeeder near a window. As children show interest, share individual time with them talking about the fish or animals. Incorporate repetition into daily routine. For example, name food and label utensils during mealtime. During group time use the same routines by talking about the weather or labeling items used during group time. Make a picture schedule that shows the order of daily routines (e.g., snack time, circle time, outside play). Show it to the children when changing routines. Make smelly boxes and feely boxes and have them available during free-choice times. Provide a variety of tastes for children to try. Provide toys that teach cause and effect: blocks for stacking and allow space for blocks to fall when stacked too high; simple switch toys that turn on and off; a water pump that makes water pour out when pushed. Hang objects in the windows that catch the light and makes patterns on the floor. Play hiding games with objects. If a child naturally puts objects together, comment and say, "Oh, you found two cars."	The size of a two-year-old's vocabulary is strongly related to how much an adult talks to the child. Early music experiences, particularly with classical music, strengthen future mathematics skills by developing the part of the brain that is used for complex reasoning tasks. Repetition forms connections in the auditory cortex.

THINKING/COMMUNICATING

Sample Learning Activities for *Older Toddlers* (24 to 36 months)

What Can Older Toddlers Do?	What Are Older Toddlers Working On?	*Planned* Activities That Help Meet Older Toddlers' Needs	*Daily Routine* Activities That Help Meet Older Toddlers' Needs	How Activities Link to Brain Research
By 36 months, understand complex sentences and up to 1000 words Use simple two-to-three word sentences Name at least one color consistently Use the words "I" or "me" when referring to themselves Can say their first and last names Can name four to six body parts Scribble with crayons and markers Put on simple garments, such as cap or socks Ask for help with personal needs, such as toileting or washing hands	Counting Pretending and engaging in fantasy play Expanding their vocabularies Working with puzzles, letters, and words	Post a daily schedule using pictures to symbolize the activities on the schedule. Refer children to the schedule when changing activities. As you read, point to words, describe pictures, and ask questions to help children connect the story to their own lives. Plan activities for labeling or sorting objects by shape, color, or size. Plan a cooking activity, and name the ingredients as you and the child add to the recipe. Add more information to what children say. Use flannel board, puppets, songs, and finger plays. Write down children's stories, and label their drawings. Provide telephones (real and play), and help toddlers talk to mom or dad. Learn new phrases or words in toddlers' home languages.	During dressing and undressing, ask for help and cooperation, such as, "Can you push your hand through the sleeve?" Name each body part during dressing and undressing. Let toddlers see you writing. Talk about what you are writing.	Experience is important in building a vocabulary. The size of a child's vocabulary is strongly related to how much a parent or caregiver talks to the child. Creating a stimulating environment and incorporating language into daily routines helps to form and strengthen the connections necessary for language development.

PHYSICAL

Sample Learning Activities for *Infants* (Birth to 12 months)

What Can Infants Do?	What Are Infants Working On?	*Planned* Activities That Help Meet Infants' Needs	*Daily Routine* Activities That Help Meet Infants' Needs	How Activities Link to Brain Research
During first four to six months, drink breast milk or formula for basic nutritional needs By four to six months, eat solid food At four months, clearly see objects that are within two feet Initially, sleep a great deal, which decreases as they grow Follow objects with their eyes Lift their heads, roll over, and begin to sit up Reach and grasp for toys Transfer object from one hand to the other Look for dropped toys Rise to sitting position Pull self up to stand Hear well	Discovering how their bodies move and feel Realizing that they can change what they see, hear, and feel through their activities Putting discrete skills together through repetition and practice Exploring the people and objects around them using all of their senses	Take several colorful toys and, one at a time, move them in front of their eyes. Blow bubbles outside so infants can watch them float away. Hang colorful mobiles where they are visible to infants — above changing tables or cribs. Place infants on their tummies, and put several of their favorite toys out of reach so they can practice seeing and reaching for objects. Put toys in a box. Get infants to reach in and take toys out and put them back again. Create a crawling course with objects of various heights and textures (i.e., pillows, rugs, soft furniture). Talk to them about what they're doing/ feeling. Put pacifiers and teethers in the refrigerator. Talk to infants about the coldness in their mouths. Go outside on walks and talk. Take turns crumbling up waxed or gift paper. Say, "What a big noise it makes!" Toss the crumbled paper on the floor to make another sound.	Infants should be fed when they are hungry, not when the clock or schedule dictates. Stop feeding infants when they indicate fullness. Watch infants for cues that they are sleepy. Dress infants so that they can move freely. Play "find the sound." Shake a bell or rattle over and behind infants' heads so that they orient toward the sounds. Use appropriate touch as often as possible.	Exposing babies to a variety of sights, sounds, and experiences will help form the connections necessary for future skills, such as grasping, crawling, and climbing. Activities that stimulate all of an infant's senses will help to ensure good development. Proper nutrition and rest helps ensure that infants' brains will develop properly. Paying close attention to infants' needs for stimulation as well as quiet time helps them to form secure attachments.

PHYSICAL

Sample Learning Activities for *Young Toddlers* (12 to 24 months)

What Can Young Toddlers Do?	What Are Young Toddlers Working On?	*Planned* Activities That Help Meet Young Toddlers' Needs	*Daily Routine* Activities That Help Meet Young Toddlers' Needs	How Activities Link to Brain Research
Walk steadily and run without falling Walk up stairs with help Pull shoes and socks off Use more fine motor skills Move with music Keep their food and cups on the table during meals and snacks Turn book pages	Walking and running skills Jumping and climbing skills Placing objects together, such as stacking blocks and putting puzzles together Controlling hands and fingers Drinking from a cup and using fingers to pick up bits of food Dressing and undressing themselves	Provide opportunities for sand and water play–offer containers of different sizes and shapes. Substitute other items at the sand table such as rice, cornmeal, or birdseed. Take children on "field trips" around the playground. Try walking different ways: quietly, stiffly, hopping, stomping Show children how to use crayons and paper. Draw circles and lines, and have them try to copy. Provide simple puzzles with two or three pieces. Provide small blocks for stacking. Let children stack them, knock them over, and put them in containers. March to music, play instruments, have pretend parades. Give children scarves that flow when they move.	Allow children to feed themselves, and be patient when they make a mess. Provide opportunities for children to practice on steps (like when going outside). Have a variety of books available to the children throughout the day. When they approach with a book, put them in your lap and model how to turn pages. Allow them to turn pages on their own, too. If you do not have time to read to them, encourage them to find a special place and read.	The brain's critical window for wiring basic body movements is birth to four years old. This is the busiest the brain will be to develop children physically. All of our physical senses provide input to the brain that helps neural pathways to grow. As neural pathways increase, so do children's physical capabilities.

PHYSICAL

Sample Learning Activities for *Older Toddlers* (24 –36 months)

What Can Older Toddlers Do?	What Are Older Toddlers Working On?	*Planned* Activities That Help Meet Older Toddlers' Needs	*Daily Routine* Activities That Help Meet Older Toddlers' Needs	How Activities Link to Brain Research
Run and climb easily Walk upstairs alone Kick a ball Thread beads Hold, throw, and catch objects Scribble with markers or crayons Play actively, then need rest Use all five senses very well	Improving fine motor skills Improving coordination and balance Toileting Self-dressing	Provide time and space for active play, such as jumping, running, balancing, and climbing. For example, play games such as Hopscotch or Ring-Around-the-Rosy. Provide toys for large muscle development, such as balls for kicking and rolling, trucks for pushing, and wagons for pulling. Provide time and space for dancing and movement activities. For example, have children dance like a monkey or hop like a bunny. Provide fine motor activities such as peg boards, stacking rings, puzzles, and lacing cards. Easel and finger painting also help with fine motor activities. Cooking activities that require stirring, sprinkling, or kneading also help with fine motor skills.	Create a relaxed atmosphere with lights turned down and quiet music. Rub children's backs at naptime. For meals and snacks, include finger foods or utensils that are easy for toddlers to use such as spoons, bowls, and cups. Make it easy for toddlers to do things without your help. For example, place cubbies, coat hooks, and paper towels at a toddler's height. Be aware of cues that signal a child is ready for toilet training.	Having opportunities to practice gross motor and fine motor skills strengthens the neural pathways that go from the brain's thinking areas to the motor areas and out to the nerves that move muscles. Periods where children can rest and recharge their energy are essential for optimal growth and development. Listening to music, particularly classical music, helps to develop the part of the brain that is used for complex physical tasks.

Handout 3.2

Activity 3.1 – How Can I Provide Responsive Care?

Directions: Read the scenarios below. Answer the following questions with your group.

1. It is Jenny's first day in preschool. She sat away from others all day and barely spoke.

   - What does this child's behavior tell you?

   - What area(s) of developmental learning should you try to promote given this behavior?

   - What planned or daily routine activities could you use to support this child's individual and developmental needs?

   - How do you think the activities you've chosen link to the brain research?

2. When Julia (four months old) wakes up from her nap, she begins waving her arms and kicking her feet.

   - What does this child's behavior tell you?

   - What area(s) of developmental learning should you try to promote given this behavior?

   - What planned or daily routine activities could you use to support this child's individual and developmental needs?

   - How do the activities you've chosen link to the brain research?

3. Tony, 26 months, refuses to pick up his toys whenever it's clean-up time. If asked to clean up, Tony will say, "No!" and walk away. He often wants to keep playing with other toys.

   - What does this child's behavior tell you?

   - What area(s) of developmental learning should you try to promote given this behavior?

   - What planned or daily routine activities could you use to support this child's individual and developmental needs?

   - How do the activities you've chosen link to the brain research?

4. Alex is a 15-month-old biter. He keeps biting all the other children.

   - What does Alex's behavior tell you?

   - What areas of developmental learning should you try to promote given this behavior?

   - What planned or daily routine activities could you use to support this child's individual and developmental needs?

   - How do the activities you've chosen link to the brain research?

5. Today, you have planned to spend some time on a thinking/communicating activity with your afternoon group. They range in age from 22 months to 32 months. From youngest to oldest, there is: Octavian, Kendra, Sheila, Tavia, and Justin. You decide to combine this structured activity with your regularly scheduled outdoor time.

   - Should outdoor time be structured, unstructured, or both?

   - What are at least three different thinking/communicating activities that you can work on with this group outside?

   - How do the activities you've chosen link to the brain research?

6. You have decided to do a cooking activity with your group when they awake from their afternoon nap. During naptime, you set up a table outside on the playground with two big bowls containing two different flavors of jello that you've already prepared. You also have spoons and smaller bowls available.

   You gather your afternoon group to go outside. They range in age from 28 to 36 months. As usual, Antonio insists on taking his naptime blanket with him outside, so you say ok.

   As your group walks out to the picnic table, Antonio lags behind the others. You finally take Antonio by the hand and settle him into place at the table beside Kendra, thinking, "Here we go again. Antonio always seems to be my afternoon challenge."

   To get started, you ask the group questions like, "What does jello feel like in your mouth?" and "What colors are these?" Then, you give each child a clean spoon. You dip your clean spoon into the large bowl of green jello, take a bite, and pass the bowl to Sheila. You ask the children to try the jello like you just did. You tell them that after they try the green jello, they may try the red jello.

   Sheila gets the green jello first and then passes it to Antonio. Antonio takes the jello, spoons out some, but then refuses to pass it to Kendra. When Kendra complains, Antonio kicks Kendra saying, "Mine! No like you!" Then, Kendra pushes Antonio. This brings back to mind your childhood memory of the time you kicked your brother at the dinner table. You remember the harsh punishment you received for it. You think to yourself, "Well, it worked! I never kicked my brother again."

   What does Antonio's behavior tell you?

- What area(s) of developmental learning should you try to promote in the future with Antonio based on his behavior?

- What planned or daily routine activities could you use to support Antonio's individual and developmental needs?

- Can the activities you chose for Antonio be considered "responsive care"? Why?

- Are there any hurdles to overcome in this situation in order to give responsive care? If so, what are they, and what might help?

7. You are a home care provider. You use developmental activities with the four infants you are assigned each day. This morning, while two of your babies are napping, you decide to work with the other two babies: Brian (four months old) and Vernita (six months old).

   Brian's single mom drops him off each morning at 7:30 a.m. and does not return until 6:30 p.m. Twice per week, she then takes Brian to her mother's home, gets him to sleep, and goes to work at a second job. Vernita has two working parents, who spend all of their non-working time parenting Vernita.

   Today, you plan to focus mainly on the infants' physical skills.

   - How realistic is it to plan activities for infants?

   - What are at least three different physical learning activities that you can work on with this group?

   - How do the activities you've chosen link to the brain research?

8. You have decided to do an objects activity to promote Brian's and Vernita's physical development.

   You gather several objects from around the room: a ball, a book with large, colorful pictures, a down blanket, and a tambourine. As an afterthought, you also grab a wool sweater you brought from home today. You place the infants and the objects on a thick, comfortable mat in the corner of the room. You lay on your tummy so that your face is at eye level with the children.

   You notice that Brian is very fussy and has difficulty calming himself. You try to shake the tambourine to get his attention, but it only makes him more fussy. You move the ball in front of his eyes, but that doesn't work either.

   Just then, the other two babies begin crying.

   - What developmental activities could you use with the objects listed above to help Brian and Vernita with physical learning? At least one activity must promote physical development because this is what you are focusing on today, but try to list ideas for promoting other developmental areas using these same objects at the same time.

   - What does Brian's behavior tell you?

- What area(s) of developmental learning should you try to promote in the future with Brian based on his behavior?

- What activities could you use to support Brian's individual and developmental needs?

- Can the activities you chose for Brian be considered "responsive care"? Why?

- Are there any hurdles to overcome in this situation in order to give responsive care? If so, what are they, and what might help?

Handout 4.1

Environmental Needs of Infants and Toddlers

Directions: Complete the worksheet below with a partner.

Infants

1. Infants require a lot of face-to-face contact, touch, and personal contact with their caregivers. How can we structure the environment to ensure responsive care?

2. Infants spend most of their time looking at ceilings, walls, and lights. How can we structure the environment to ensure responsive care?

3. Infants explore the world by placing objects in their mouths. How can we structure the environment to ensure responsive care?

4. Infants like to practice body movements while lying down. How can we structure the environment to ensure responsive care?

5. Infants require a lot of monitoring. How can we structure the environment to ensure responsive care?

Toddlers

1. Toddlers are beginning to experience peer play and social conflicts. How can we structure the environment to ensure responsive care?

2. Toddlers are beginning to express themselves creatively and play fantasy games. How can we structure the environment to ensure responsive care?

3. Toddlers like their products displayed. How can we structure the environment to ensure responsive care?

4. Toddlers are within the critical window for large muscle physical development. How can we structure the environment to ensure responsive care?

5. Toddlers sometimes do not consider the needs of younger children. How can we structure the environment to ensure responsive care?

Handout 4.2

Enviro-Assessment

Directions: Complete this four-part assessment of your caregiving environment. For each part, assess all areas by checking either "yes" or "no."

Part I—General Indoor Assessment	*Check one in each row:*	
1. Feel of the Room is		
♦ Warm and caring	❑ *Yes*	❑ *No*
♦ Secure	❑ *Yes*	❑ *No*
♦ Pleasing to your sight, smell, touch, hearing	❑ *Yes*	❑ *No*
♦ Homelike	❑ *Yes*	❑ *No*
2. Lighting is		
♦ Easy on the eyes of infants, toddlers	❑ *Yes*	❑ *No*
♦ Natural (at least partly)	❑ *Yes*	❑ *No*
3. Air Flow includes		
♦ Good room temperature	❑ *Yes*	❑ *No*
♦ Natural air (from outdoor air and non-poisonous plants)	❑ *Yes*	❑ *No*
4. Layout includes		
♦ Well-defined areas	❑ *Yes*	❑ *No*
♦ Barriers to avoid mixing infants with toddlers	❑ *Yes*	❑ *No*
♦ Noisy and quiet areas for toddlers	❑ *Yes*	❑ *No*
♦ Places for giving infants quiet personal contact	❑ *Yes*	❑ *No*
♦ Easy access to outdoors	❑ *Yes*	❑ *No*
♦ Areas which let children use their large and small muscles; all five senses; imagination	❑ *Yes*	❑ *No*
♦ Organized storage areas for all toys and materials	❑ *Yes*	❑ *No*
♦ Diapering and changing needs that are within caregiver's easy reach	❑ *Yes*	❑ *No*
♦ Ability to see entire room at all times	❑ *Yes*	❑ *No*
♦ Low windows for children to look out	❑ *Yes*	❑ *No*

5. Play Materials are

- In enough quantity of same toys for at least three or four children ❑ *Yes* ❑ *No*
- Wide in variety ❑ *Yes* ❑ *No*
- Changed out from time to time ❑ *Yes* ❑ *No*
- Within reach of children ❑ *Yes* ❑ *No*
- Stored when not in use ❑ *Yes* ❑ *No*
- Not breakable or small enough to place in mouths ❑ *Yes* ❑ *No*

6. Fixtures and Furnishings include

- Hot and cold water ❑ *Yes* ❑ *No*
- Child-sized chairs, tables, shelves, and climbing structures ❑ *Yes* ❑ *No*
- Strong furniture ❑ *Yes* ❑ *No*
- All electrical outlets covered ❑ *Yes* ❑ *No*
- Wall displays at children's eye level for children's work ❑ *Yes* ❑ *No*
- Children's artwork ❑ *Yes* ❑ *No*
- Appropriate colors (no red, orange, yellow, hot pink, or chartreuse) ❑ *Yes* ❑ *No*
- Phones placed for easy use ❑ *Yes* ❑ *No*
- Firm cushioned surfaces for infants ❑ *Yes* ❑ *No*

Part II—Indoor Centers Assessment *Check one in each row:*

1. Do you have these centers for children?

- Art ❑ *Yes* ❑ *No*
- Blocks ❑ *Yes* ❑ *No*
- Books/Listening ❑ *Yes* ❑ *No*
- Cooking ❑ *Yes* ❑ *No*
- Dramatic Play ❑ *Yes* ❑ *No*
- Manipulatives/Table Toys ❑ *Yes* ❑ *No*
- Music/Movement ❑ *Yes* ❑ *No*
- Sand/Water ❑ *Yes* ❑ *No*
- Science/Discovery ❑ *Yes* ❑ *No*
- Writing/Printing ❑ *Yes* ❑ *No*

2. Are there enough materials in each center for three or four children to have the same toy? ❑ *Yes* ❑ *No*

3. **Are the materials in each center in good shape?** ❑ *Yes* ❑ *No*

4. **Are the materials appropriate for the childrens' ages and developmental learning needed?** ❑ *Yes* ❑ *No*

Part III—Outdoor Assessment *Check one in each row:*

1. **Child-Sized Equipment is available including equipment for**
   - ♦ Climbing ❑ *Yes* ❑ *No*
   - ♦ Swinging ❑ *Yes* ❑ *No*
   - ♦ Crawling ❑ *Yes* ❑ *No*
   - ♦ Throwing ❑ *Yes* ❑ *No*
   - ♦ Balancing ❑ *Yes* ❑ *No*
   - ♦ Riding ❑ *Yes* ❑ *No*
   - ♦ Jumping ❑ *Yes* ❑ *No*

2. **Varied Areas are available including**
   - ♦ Paved area ❑ *Yes* ❑ *No*
   - ♦ Covered area with work space ❑ *Yes* ❑ *No*
   - ♦ Garden area ❑ *Yes* ❑ *No*
   - ♦ Natural area ❑ *Yes* ❑ *No*
   - ♦ Enclosed area ❑ *Yes* ❑ *No*
   - ♦ Sitting area ❑ *Yes* ❑ *No*
   - ♦ Storage area ❑ *Yes* ❑ *No*
   - ♦ Wide open space ❑ *Yes* ❑ *No*
   - ♦ Area separated from older children's play area ❑ *Yes* ❑ *No*
   - ♦ Area for the use of wheel toys ❑ *Yes* ❑ *No*

3. **Outdoor Fixtures are available, including**
   - ♦ Water faucets ❑ *Yes* ❑ *No*
   - ♦ Electrical outlets (accessible and covered) ❑ *Yes* ❑ *No*

4. **First Aid Kit is available** ❑ *Yes* ❑ *No*

Part IV—Health & Safety Assessment *Check one in each row:*

1. All electrical outlets are covered. ❑ *Yes* ❑ *No*
2. There are no breakable items within children's reach. ❑ *Yes* ❑ *No*
3. Carpeting is low-pile so small objects cannot hide. ❑ *Yes* ❑ *No*
4. Materials and furnishings are non-toxic. ❑ *Yes* ❑ *No*

5.	Walkways are clear and unobstructed.	❑ *Yes*	❑ *No*
6.	Play area is fenced in.	❑ *Yes*	❑ *No*
7.	There is either sand, wood chips, or mats under all outdoor climbing equipment.	❑ *Yes*	❑ *No*
8.	All equipment meets consumer safety standards.	❑ *Yes*	❑ *No*
9.	All toys and play equipment are in good condition (not broken or damaged).	❑ *Yes*	❑ *No*
10.	All cleaning supplies and medicines are locked securely in cabinets, which children cannot access.	❑ *Yes*	❑ *No*
11.	There are no poisonous or dangerous plants within children's reach.	❑ *Yes*	❑ *No*
12.	There are no sharp corners on furnishings or anywhere inside.	❑ *Yes*	❑ *No*
13.	Diapering, cooking, and feeding areas are separate.	❑ *Yes*	❑ *No*
14.	Diapering, cooking, and feeding areas are cleaned after every use.	❑ *Yes*	❑ *No*
15.	Adult sinks in the changing area and feeding area have both hot and cold water.	❑ *Yes*	❑ *No*
16.	Pillow and cushion covers are washed on a regular basis.	❑ *Yes*	❑ *No*
17.	Couches and mattresses are easy to clean.	❑ *Yes*	❑ *No*
18.	Sleeping mats are fitted with washable covers.	❑ *Yes*	❑ *No*
19.	There are no bare light bulbs anywhere.	❑ *Yes*	❑ *No*
20.	There is a regular schedule for cleaning walls, floors, and rugs.	❑ *Yes*	❑ *No*
21.	Children get fresh air every day.	❑ *Yes*	❑ *No*
22.	There is no peeling paint or broken floor tiles anywhere.	❑ *Yes*	❑ *No*
23.	A first aid kit is available both outside and inside.	❑ *Yes*	❑ *No*
24.	Toys are washed daily.	❑ *Yes*	❑ *No*
25.	Gloves are used for diapering and first aid.	❑ *Yes*	❑ *No*

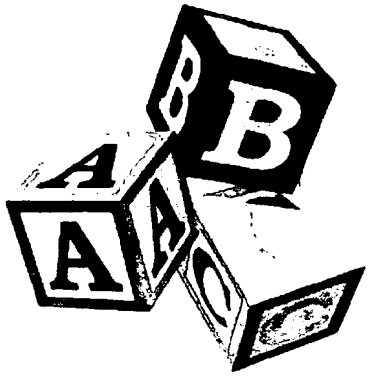
Building Babies' Brains

A Training for Infant/Toddler Caregivers

Building Babies' Brains

Lesson 1: Welcome and Overview

- Training Focus
- Agenda
- Participant's Guide
- Housekeeping
- Two Activities

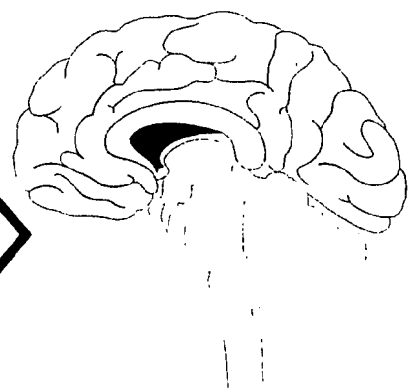


Slide 1.1

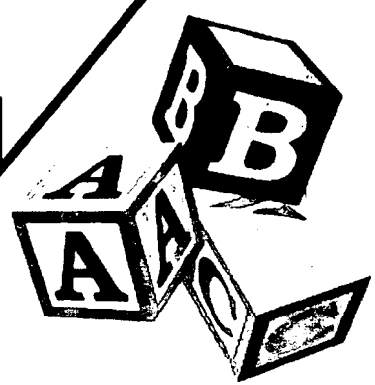
Building Babies' Brains

The Brain:
What Goes In and What Comes Out

- Heredity
- Prenatal Care
- Your Care
- Other Experiences



- Capabilities
- Achievement
- Well Being



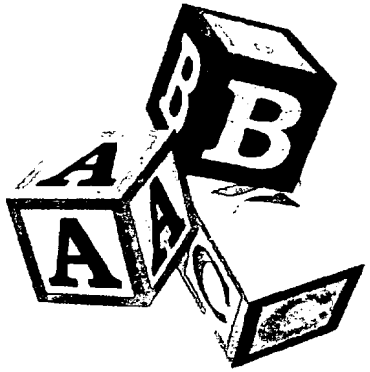
Slide 1.2

Building Babies' Brains

Lesson 2: What Is Responsive Care, and Why Should I Provide It?

Focus of this session:

- Type of care
- Research
- Your opportunity

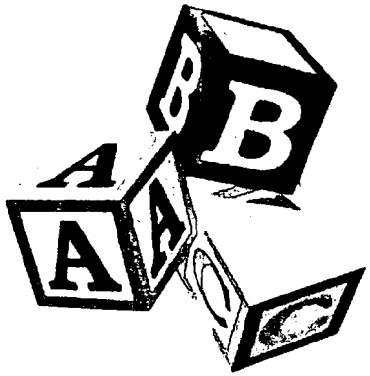


Slide 2.1

Building Babies' Brains

Goals

- Explain the three main types of development.
- Explain the meaning of "responsive care."
- Discuss why it might be difficult to provide responsive care at times and what might make it easier.
- Explain how a child's brain grows.
- Give reasons why you should provide responsive care to every child everyday.



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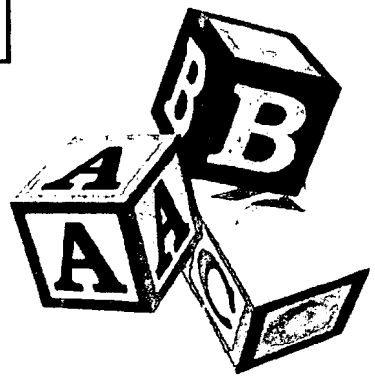
Slide 2.2

Building Babies' Brains

Stages of Development

Infants	Birth to 12 Months
Young Toddlers	12 Months to 24 Months
Older Toddlers	24 Months to 36 Months



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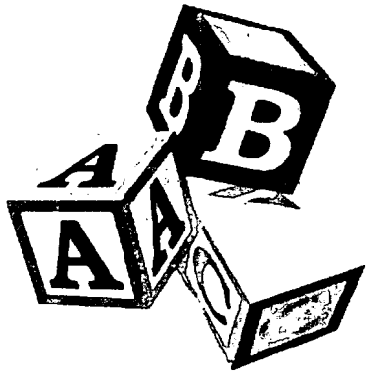
Slide 2.3

Building Babies' Brains

Areas of Development

- Social/Emotional
- Thinking/Communicating
- Physical



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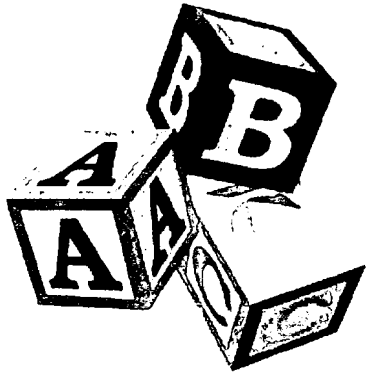
Slide 2.4

Building Babies' Brains

Social/Emotional

The way children

- Relate to others
- Feel and express feelings
- Become independent
- Signs: how they handle anger, follow rules, separate, trust



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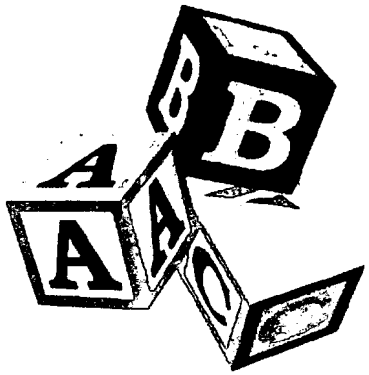
Slide 2.5

Building Babies' Brains

Thinking and Communicating

The way children

- Perceive
- Think
- Learn
- Communicate with others
- Signs: level of curiosity, problem solving, ability to understand and use words



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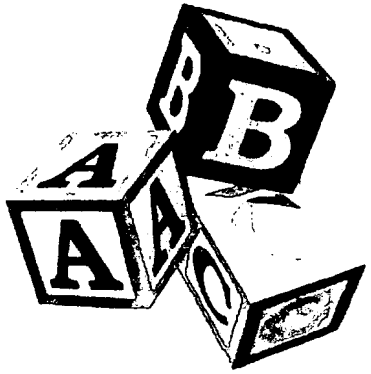
Slide 2.6

Building Babies' Brains

Physical

- Size (height and weight)
- Muscle control
- Coordination
- Signs of gross motor skills: how they balance, climb, run, jump, hop, throw, and catch
- Signs of fine motor skills:
  how they hold a spoon,
  use scissors, hold a crayon



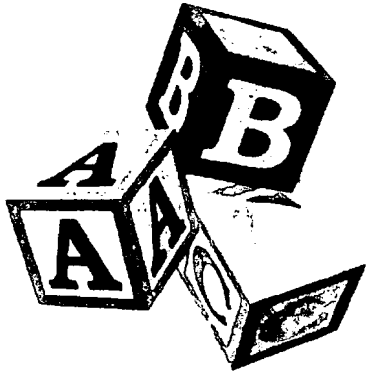
Slide 2.7

Building Babies' Brains

Critical Windows

Times from birth to age 12 when the brain

- Allows more learning
- Grows more
- Sets a basic structure

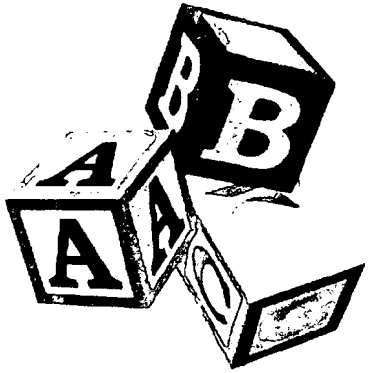


Slide 2.8

Building Babies' Brains

Life-Long Learning

Brain structure can change throughout life, but not as easily as it can during the first three years.



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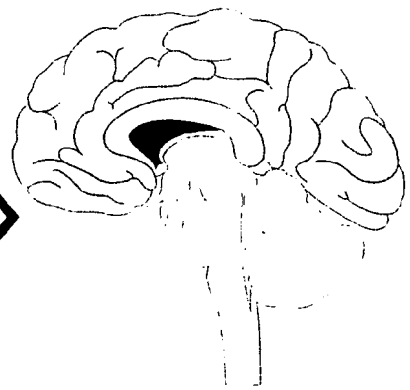
Slide 2.9

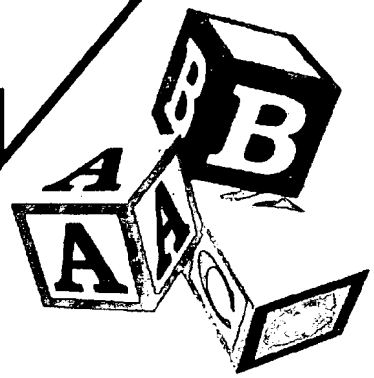
Building Babies' Brains

The Brain:
What Goes In and What Comes Out

- Heredity
- Prenatal Care
- **Your Care**
- Other Experiences



- Capabilities
- Achievement
- Well Being



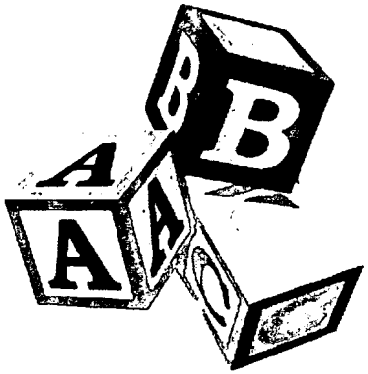
Slide 2.10

Building Babies' Brains

Responsive Care

Being attentive to the individual needs of each child, responding in a way that promotes development in at least one area, using the "Six T's" every day:

- Tuning In
- Teaching
- Time
- Talk
- Touch
- Trust



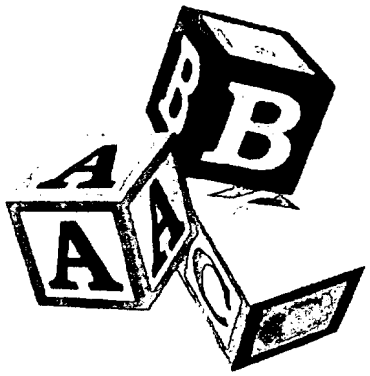
Slide 2.11

Building Babies' Brains

When to Use Responsive Care

Responsive care is used during

- Planned times
- Daily routines



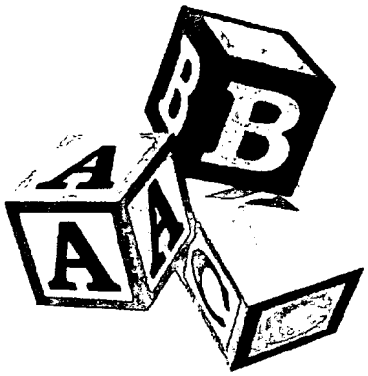
Slide 2.12

Building Babies' Brains

Primary Caregivers

The primary caregiver is a special person who

- Welcomes children first thing in the morning.
- Comforts them.
- Plans activities for them.
- Communicates with parents.
- Feeds and diapers most often.



Slide 2.13

Building Babies' Brains

Responsive Care

Being attentive to the individual needs of each child, responding in a way that promotes development in at least one area, using the "Six T's" every day:

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- Teaching
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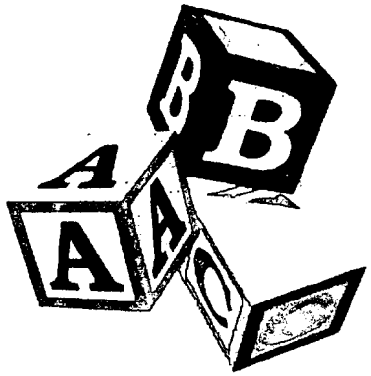
- Talk
- Touch
- Trust

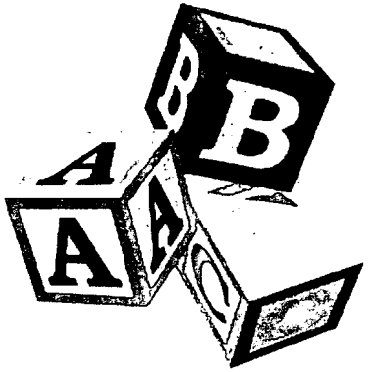


Slide 2.14

Building Babies' Brains

Your Goal

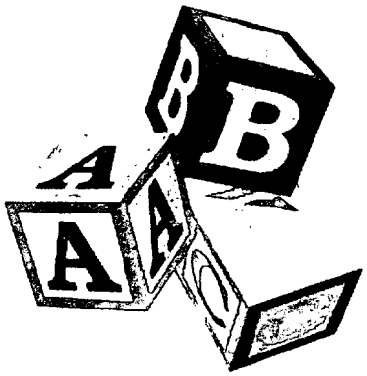
To give responsive care each and every time you interact with a child.



Slide 2.15

Hurdles and Helps (1)

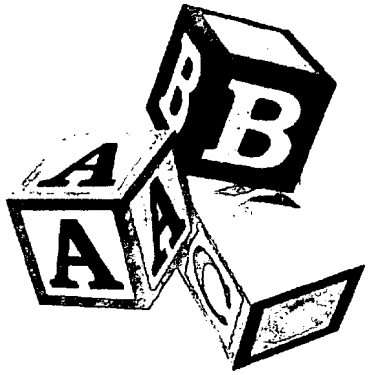
Miss Tara feels caregivers should not pick up a baby each time the baby cries. This, she believes, spoils children and makes more work for caregivers.



Slide 2.16

Hurdles and Helps (2)

You've had a personal problem all week. You feel like snapping, and you can't focus. You're exhausted, and your head is pounding.

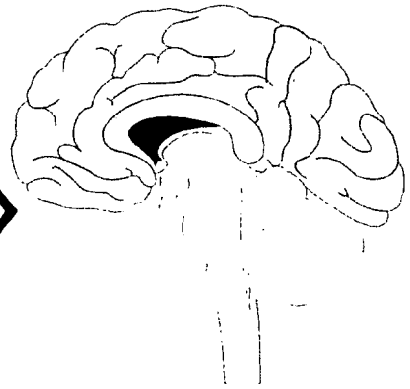


Slide 2.17

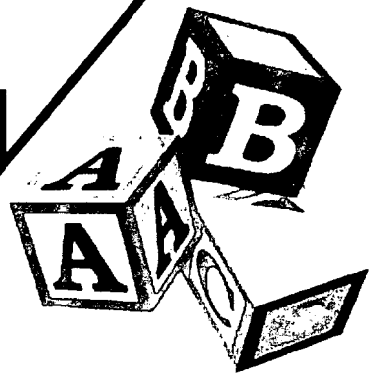
Building Babies' Brains

The Brain:
What Goes In and What Comes Out

- Heredity
- Prenatal Care
- Your Care
- Other Experiences



- Capabilities
- Achievement
- Well Being

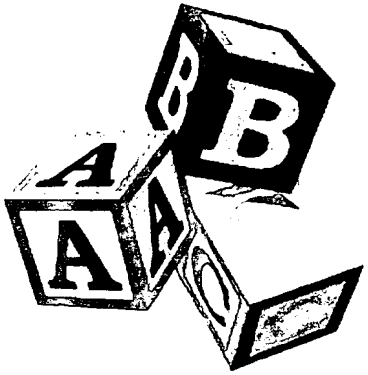


Slide 2.18

Building Babies' Brains

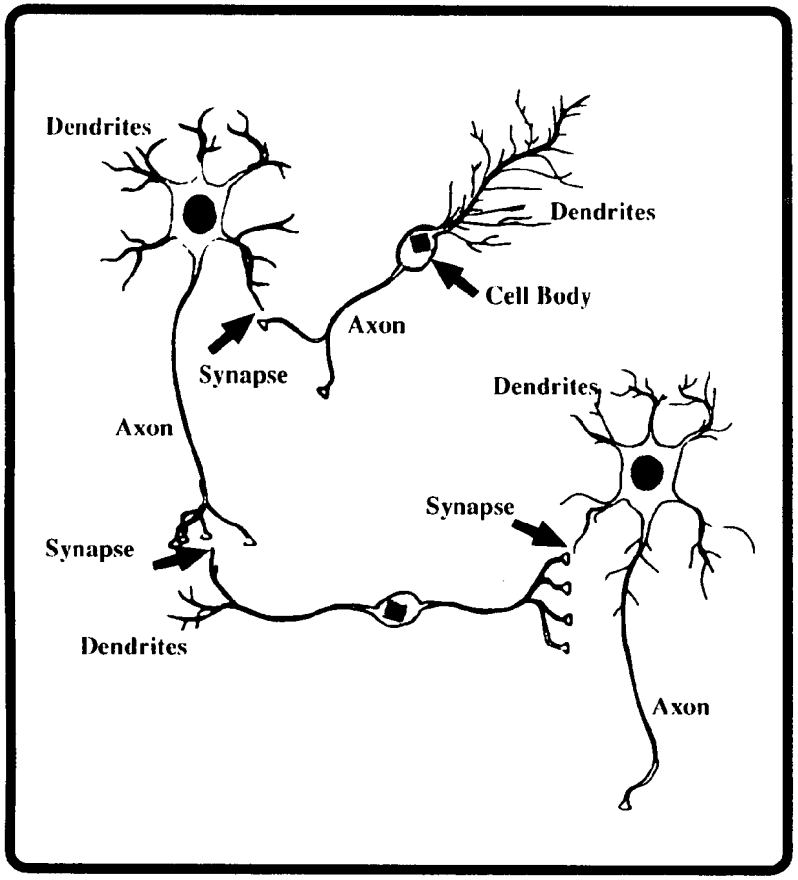
Heredity:
The Genes Given to Us by Our Parents

- We are born with 100 billion brain cells and connections.
- The basic structure of those connections depends upon heredity.



Slide 2.19

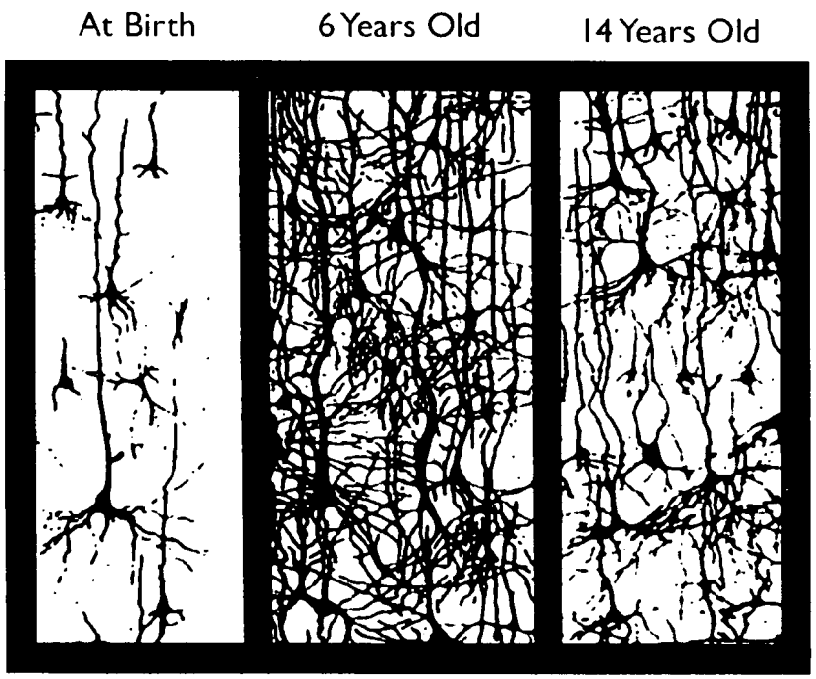
Neurons: The Building Blocks



- Born with 100 billion
- Waiting to connect
- Cell body, axon, dendrites, and synapses

Slide 2.20

Synaptic Density



Rima Shore, *Rethinking the Brain: New Insights Into Early Development*

Synapses are created with astonishing speed in the first three years of life. For the rest of the first decade, children's brains have twice as many synapses as adults' brains.

Slide 2.21

The brain is the ultimate "use-it-or-lose-it" machine.

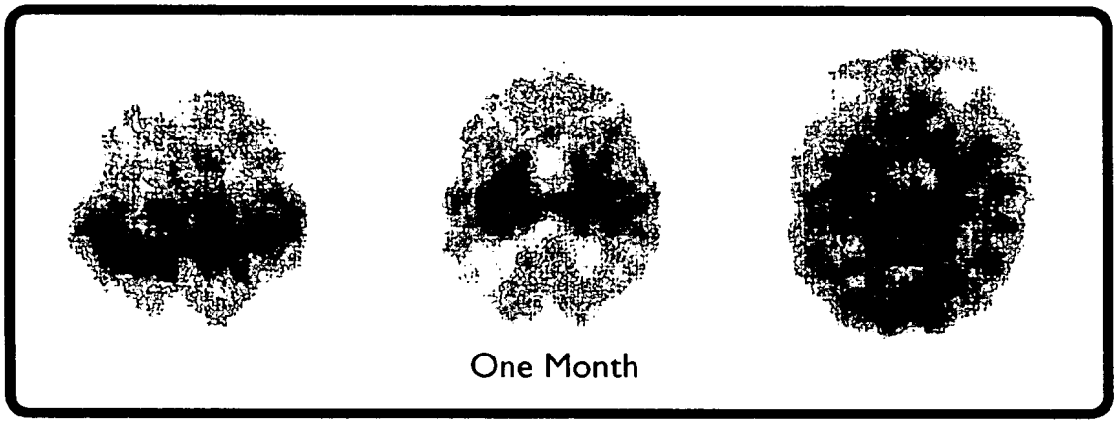
Number of synapses:

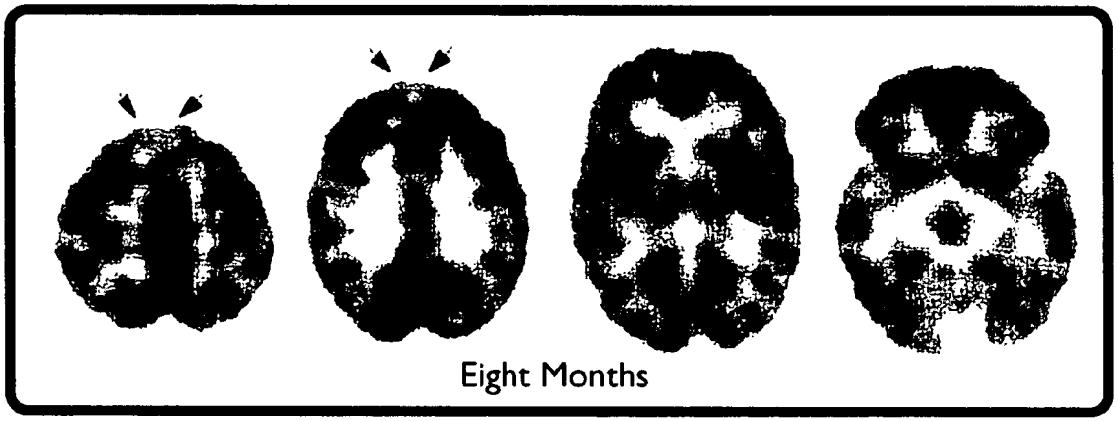
- at birth: 50 trillion
- at 1 year: 1000 trillion
- at age 20: 500 trillion

Rima Shore. *Rethinking the Brain: New Insights Into Early Development*

Slide 2.22

PET Scans:
One Month and Eight Months





Dr. H.T. Chugani, Children's Hospital of Michigan, Wayne State University

Slide 2.23

PET Scans: Five Days to 28 Years

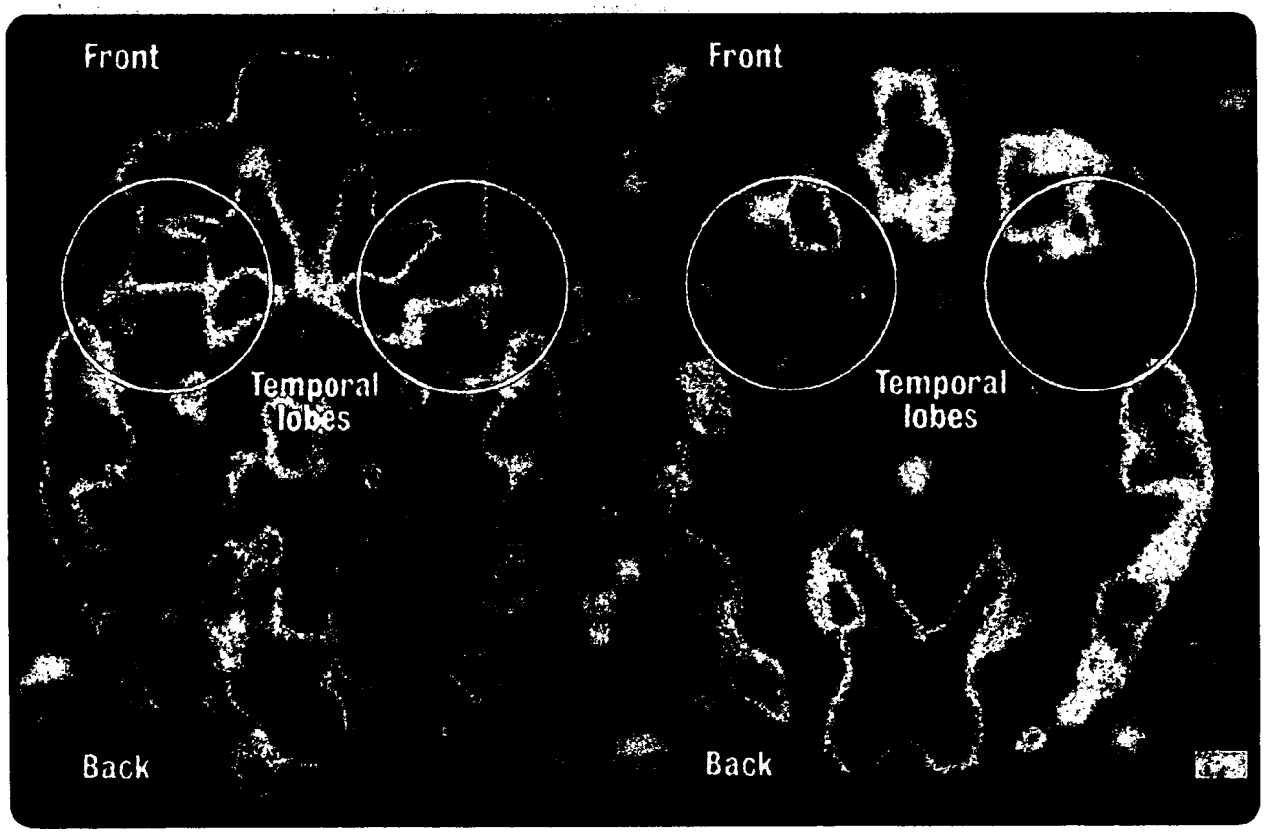
5 days | 2 months | 1 year | 28 years

Rapid Early Development: These PET scans suggest that the brain of a one-year-old more closely resembles an adult's brain than a newborn's.

Rethinking the Brain: New Insights Into Early Development, The Families and Work Institute

Slide 2.24

Effects of Extreme Deprivation



Healthy Child

Neglected Child

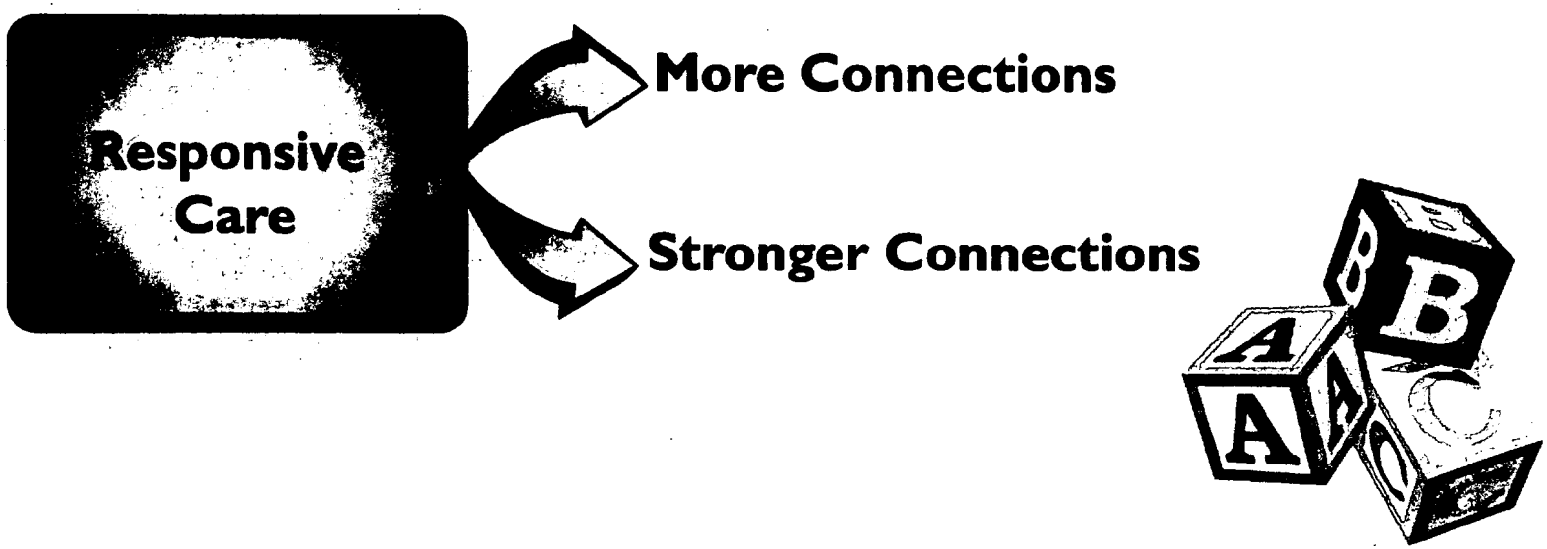
Courtesy of Dr. H.T. Chugani from the Children's Hospital of Michigan, Wayne State University

Slide 2.25

Building Babies' Brains

What Does the Brain Research Mean to You?

Responsive care creates a set of connections different from those created by unresponsive care.

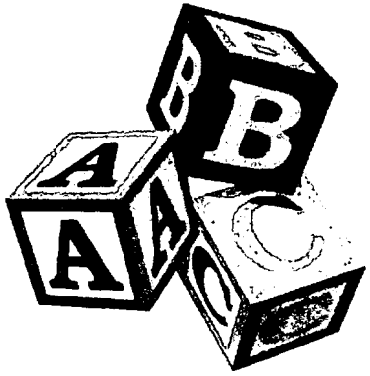


Slide 2.26

Building Babies' Brains

Life-Long Learning

Brain structure can change throughout life, but not as easily as it can during the first three years.

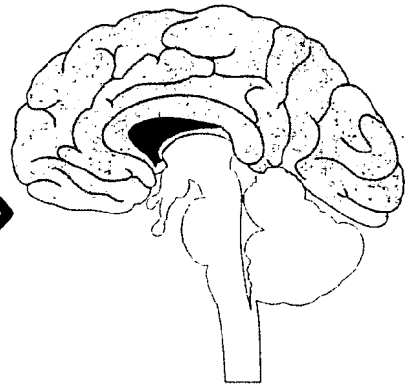


Slide 2.27

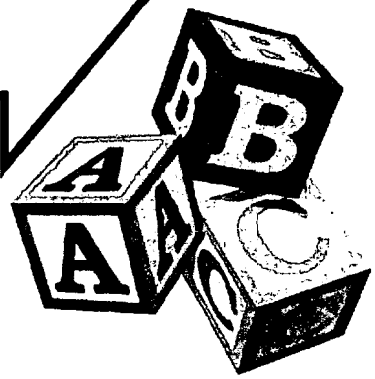
Building Babies' Brains

The Brain:
What Goes In and What Comes Out

- Heredity
- Prenatal Care
- Your Care
- Other Experiences



- **Capabilities**
- **Achievement**
- **Well Being**

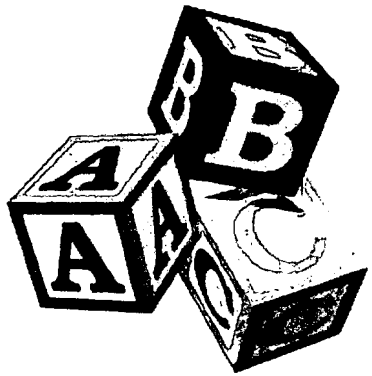


Slide 2.28

Building Babies' Brains

Goals

- Explain the three main types of development.
- Explain the meaning of "responsive care."
- Discuss why it might be difficult to provide responsive care at times and what might make it easier.
- Explain how a child's brain grows.
- Give reasons why you should provide responsive care to every child every day.



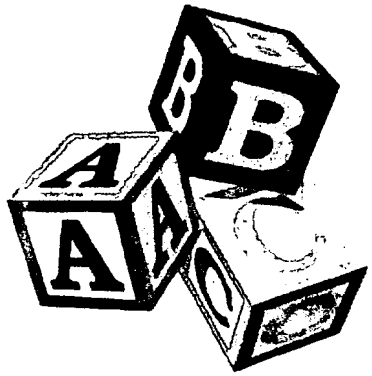
Slide 2.29

Building Babies' Brains

Lesson 3: How Can I Provide Responsive Care?

Focus of this session:

- Specific ways to provide responsive care

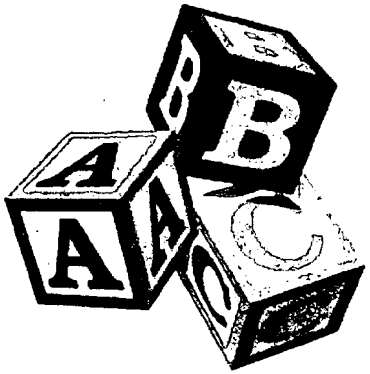


Slide 3.1

Building Babies' Brains

Goals

- Define *individual needs* and *developmental needs.*
- Identify messages that children send about their needs.
- Explain the importance of scheduling.
- Choose activities that meet children's individual and developmental needs.



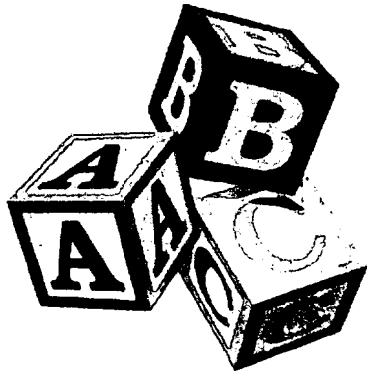
Slide 3.2

Building Babies' Brains

Responsive Care

Being attentive to the individual needs of each child, responding in a way that promotes development in at least one area, using the "Six T's" every day:

- Tuning In
- Teaching
- Time
- Talk
- Touch
- Trust



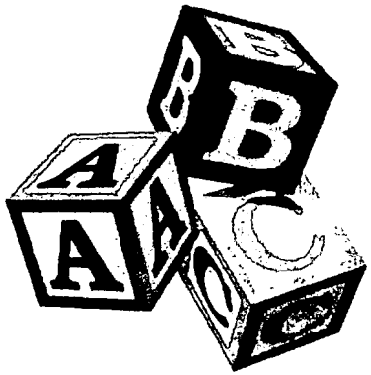
Slide 3.3

Building Babies' Brains

Individual Needs

Tune in to children's

- Emotions
- Abilities
- Interests
- Personality
- Culture
- Home life
- Learning style

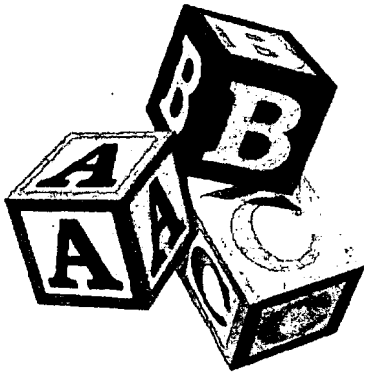


Slide 3.4

Building Babies' Brains

Being Attentive

- Don't make assumptions until you consider all the cues.
- Listen to words and sounds.
- Watch for non-verbal behavior.
- Look for new behavior.



Slide 3.5

Building Babies' Brains

Responsive Care

Being attentive to the individual needs of each child, **responding in a way that promotes development in at least one area,** using the "Six T's" every day:

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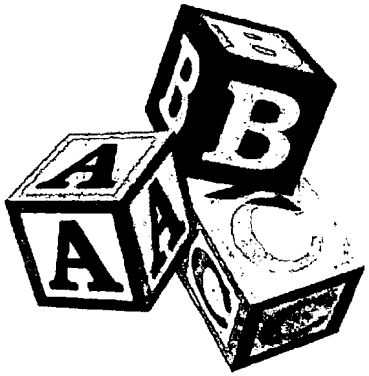
- Teaching
- Time
- Talk
- Touch
- Trust



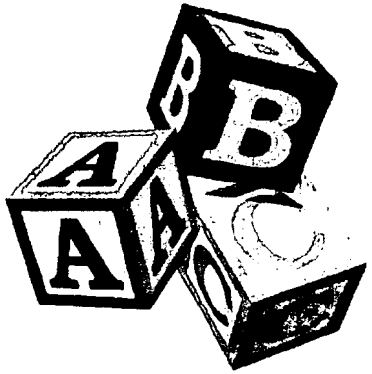
Slide 3.6

Building Babies' Brains

Developmental Needs

Use activities to teach children that are

- Appropriate for the child's age.
- Promote social/emotional, thinking/communicating, and physical development.



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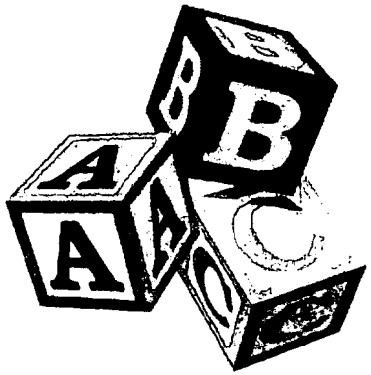
Slide 3.7

Building Babies' Brains

Scheduling

- Consistency and security help children to develop trust.
- Planned time allows groups/individuals to work on developmental areas.



Slide 3.8

Building Babies' Brains

Goals

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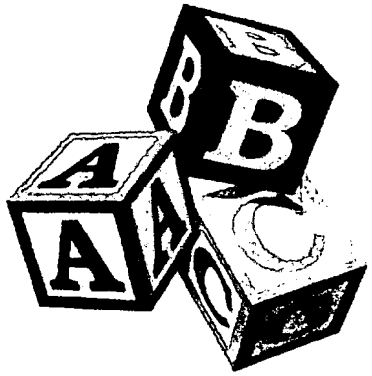
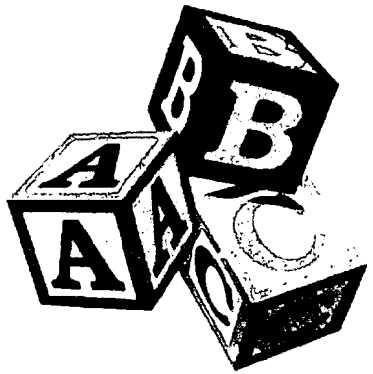


Slide 3.9

Building Babies' Brains

Importance of Your Role

- YOU ARE IMPORTANT!!
- You can shape children's brains.
- You can shape children's lives.



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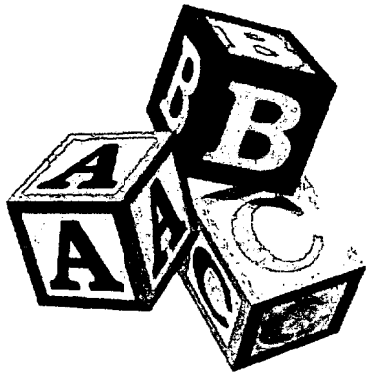
Slide 3.10

Building Babies' Brains

Lesson 4: Does Our Caregiving Environment Promote Responsive Care?

Focus of this session:

- What is a quality caregiving environment?
- How does it affect responsive care?

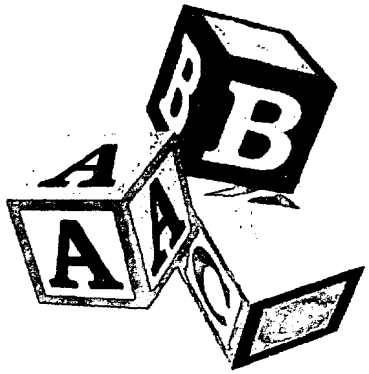


Slide 4.1

Building Babies' Brains

Goals

- Explain how to make the environment meet the needs of infants and toddlers.
- Assess your own environment, and describe the changes you should make.

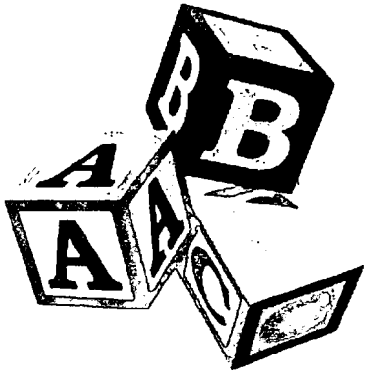


Slide 4.2

Building Babies' Brains

Physical Environment

- Feel of the room
- Physical parts
- Health and safety factors

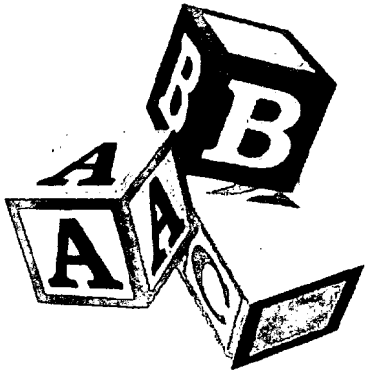


Slide 4.3

Building Babies' Brains

Key Points to Remember

- Lighting–some natural
- Air flow–some fresh
- Play materials–wide variety and quantity
- Fixtures–fit for children
- Colors–blues, greens, light pink, light purple, peach, brown, white, some black

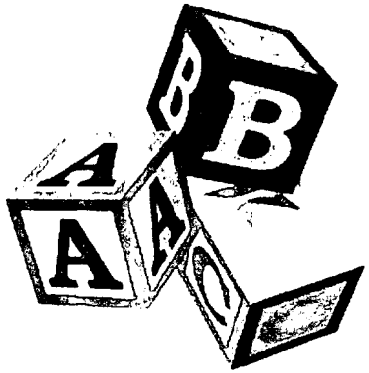


Slide 4.4

Building Babies' Brains

Work Arounds

- Allow children's developmental needs to be met.
- Allow high scores on the assessment.



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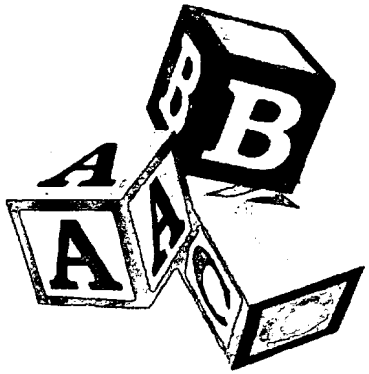
Slide 4.5

Building Babies' Brains

Goals

- Explain how to make the environment meet the needs of infants and toddlers.
- Assess your own environment, and describe the changes you should make.



Slide 4.6

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