

NURTURING THE DEVELOPMENT OF YOUNG CHILDREN



AGENDA

- Starter
- Neuro-what?
- Serve and Return
- Developmental Milestones
- Conclusion
- Student Assessment

Objectives

Students will understand why it is essential to support the development of young children.

Students will learn how they can positively impact the development of a child.

Students will comprehend neuroplasticity and the role it plays over a person's lifetime.

Materials Needed

- An internet connection and device to play a video (Parts I and II)
- One copy of the “Brain Plasticity” activity sheet to display (Part I)
- Board or chart paper and markers (Part II)
- One copy of the “Developmental Milestones” activity sheet for each student (Part III)

Starter (5 minutes)

Begin class by asking students, “Who wants to be a parent one day?” After students respond, say, “Raise your hand if you’ve ever had to take care of a baby or a small child.” After a show of hands, ask, “How many of you think you know a lot about how babies communicate?” Then say, “Today, we’re going to watch a social experiment involving a baby and a parent called ‘Still Face Experiment.’ Pay close attention to the types of facial expressions that relate to specific emotions.” Then play <https://www.youtube.com/watch?v=leHcsFqK7So>.

After watching the video, ask students how the experiment made them feel (*answers could include sad, uncomfortable, angry*). Once several students have responded, say, “The video we watched shows us the effect parents have on young children. So, how can we make sure those effects are positive ones?” After a brief pause, say, “Today we’re going to learn ways to engage, encourage, support, and enhance young children’s growth and development.”

Part I Neuro-what? (10 minutes)

Purpose: Students learn how a young child’s mind develops.

1. Students discover the rate at which our minds develop.

Ask students if they think there are many differences between a 16-year-old and a 17-year-old. Do they think a lot of development takes place during that year? Give volunteers a chance to respond, and then ask them to consider the differences between a newborn and a one-year-old. Ask students, “Who do you think develops more? Someone going from 16 to 17 years old or a baby in the first year of their life?” Then, say, “The first years of our life are when our minds develop the most, and this is due to something called ‘neuroplasticity.’”

2. Students learn about neuroplasticity.

Tell students that “neuroplasticity”—also known as “brain plasticity”—is the ability of our brains to change and adapt throughout our lives. Then, say, “Our brain is made up of neurons, which are cells that send messages to the rest of our bodies. During our earliest years, these neurons constantly form connections with each other, enhancing our ability to learn and impacting how we behave and communicate.”

Then, ask students, “How many neural connections do you think a child’s brain makes each second during their early years of development?” After several students respond, say, “A child’s brain makes over 1 million connections a second! That’s over 86 billion connections every day!” Then say, “Research has shown that exposure to the right kind of environment during the first years of life actually affects the physical structure of a child’s brain, vastly increasing the number of neural connections. This means that the more engaging and positive an environment is when a child is young, the more neural connections they will have.”

3. Students learn that it is easier for a young mind to develop.

Display the “Brain Plasticity” activity sheet where students can see it (*for example, on a SMART Board or projected onto a screen*). Guide them to see that it takes significantly more effort to change as we grow older compared to when we are younger. Say, “These neural connections in our earliest years of life are part of the reason why it’s easier for young children to learn a language than for an adult. Young minds are incredible!”

Stress that since it is easier for young minds to develop, it is important to provide them with a stimulating environment. Say, “Children are learning all the time through their environment, their own actions, and through playing with the adults and other children in their lives. It’s important that we do everything we can to nurture that development.”

Part II Serve and Return (15 minutes)

Purpose: Students learn that “Serve and Return” is critical for brain building in young minds.

1. Students learn about “Serve and Return.”

Tell students that one of the key ways we can support children’s development is through something called “Serve and Return.” Say, “‘Serve and Return’ is a playful back-and-forth interaction in which we respond to a child’s verbal cues and actions.” Then, show students the “5 Steps for Brain-Building Serve and Return” video at the following link: www.youtube.com/watch?v=KNrnZag17Ek.

2. Students review the five steps of “Serve and Return.”

Display the five steps of “Serve and Return” where students can see them and read them aloud:

1. Notice the serve and share the child’s focus of attention.
2. Return the serve by supporting and encouraging.
3. Give it a name!
4. Take turns and wait. Keep the interaction going back and forth.
5. Practice endings and beginnings.

Ask students to identify ways they can practice “Serve and Return” with a child (for example, reading a book together, going for a walk, going to the store, playing with blocks). Remind students that “Serve and Return” interactions should be positive and fun and are vital to a child’s healthy brain development.

3. Students see the effect of neglect on a child’s brain development.

Show students the image of the PET scan at the following link: www.onesky.org/the-situation/a-babys-brain. Have students point out the differences they notice in the two brains. Ask, “Which brain has more areas of activity?” After students respond, say, “Not only is it essential to support the development of young minds, but neglecting to support a child’s development can cause a significant amount of physical and emotional damage. And while it’s possible to repair the damage of a brain that was neglected during development, we’re going to learn strategies for supporting developmental milestones that will help ensure the children in our lives grow in a way that is healthy and happy.”

Part III Developmental Milestones *(20 minutes)*

Purpose: Students will learn how to support a young child’s development.

1. Students discover ways to support developmental milestones.

Distribute copies of the “Developmental Milestones” activity sheets to each student and have them take a few minutes to read the material. Say to students, “As young children grow emotionally, physically, and socially, it’s very important to help them develop in a happy, safe, and healthy way. These handouts list just some of the milestones in a young child’s development and ways we can support them.”

2. Students participate in a group activity.

Break students into groups of four or five. Direct each group to create a one-minute Public Service Announcement (PSA) that focuses on what we can do to support the development of a young child in everyday situations. Ask them to keep in mind what they learned about “Serve and Return.” Subjects for the PSA could include the following:

- Teaching a baby how to crawl
- Taking a young child to the grocery store
- Cooking dinner with a child
- Going for a walk with a child

Tell students they will have 10 minutes to create their PSA. Once they are finished, ask each group to present their PSA to the class. When each presentation concludes, ask a representative of the group to explain their PSA and how they think its message could help young children.

Conclusion *(3 minutes)*

Read this quote to your students, “Every day, in 100 small ways, our children ask, ‘Do you hear me? Do you see me? Do I matter?’ Their behavior often reflects our response.” Ask volunteers to share what this quote means to them. Then, conclude the lesson by reminding students, “As we’re learning to manage our lives, it’s important to take care and nurture this group of people who are the most in need of our support—young children.”

Student Assessment

1. What is neuroplasticity, and why is it important?
2. Why is “Serve and Return” important to a child’s development?
3. What can happen if we do not support a child’s development?
4. Describe three developmental milestones and ways you can support them.

LESSON EXTENSIONS

Using Quotations

“The human brain has 100 billion neurons; each neuron is connected to 10,000 other neurons. Sitting on your shoulders is the most complicated object in the known universe.”

Have students write about what this quote means to them.

Addressing Multiple Learning Modes

Ask students to turn to a partner and describe a person who had a positive impact on their life when they were younger. It may be a family member, teacher or sporting coach. Then, ask the class, “How do you think this person made a difference in your development?” Have student volunteers share their thoughts with the class.

Writing in Your Journal

Have students write themselves a letter in which they share their ideas for how they can be a positive factor in young children’s lives now and in the future. When your students are finished, ask for volunteers to share parts of what they wrote.

Homework

Have students create a poster or comic strip illustrating how the “Serve and Return” interaction supports a child’s development. Have students present their posters or comic strips to the class.

Using Technology

Have your students visit one of these websites to learn more about nurturing young children. Ask students to share their findings with the class in a brief presentation:

- www.naeyc.org
- www.cdc.gov/ncbddd/actearly/milestones/index.html
- www.zerotothree.org
- developingchild.harvard.edu

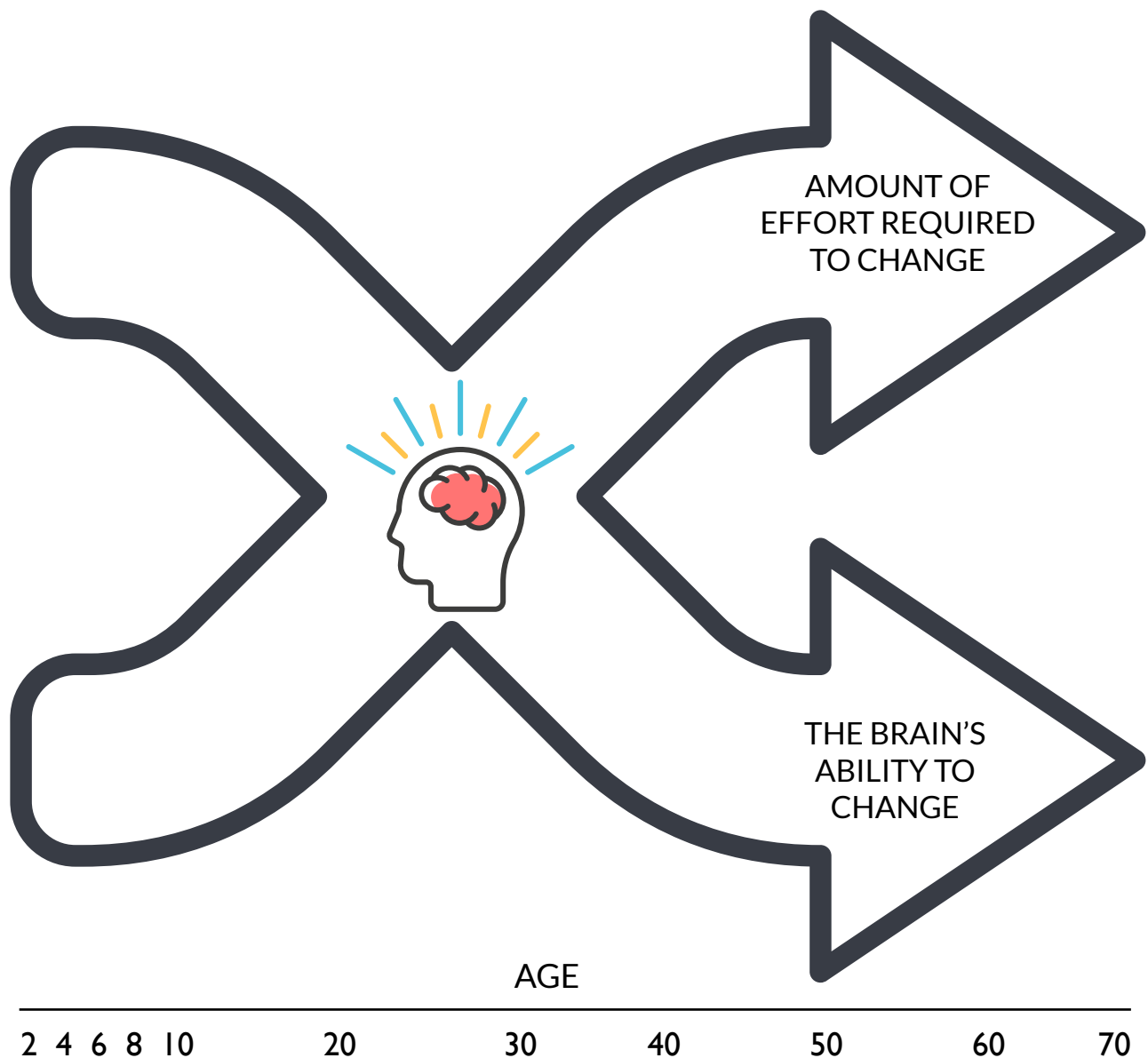
Additional Resources

Have students watch the “Brain Hero” video at www.youtube.com/watch?v=s31HdBeBgg4.

Discuss the video as a class and how actions by a young child’s family, teachers, and community can impact their development.

BRAIN PLASTICITY

Neuroplasticity (or brain plasticity) is the ability of the brain to change and adapt throughout a person's life. Your brain's plasticity is especially strong in the earliest years of your life.



DEVELOPMENTAL MILESTONES

MILESTONES	SUPPORT
TWO MONTHS	
<p>Smiles at people</p> <p>Turns head toward sounds</p> <p>Can hold their head up on their own</p>	<p>Look at pictures of relatives with them</p> <p>Talk, read, and sing to them</p> <p>Encourage them to lift their head by holding a toy at eye level</p>
FOUR MONTHS	
<p>Begins to babble and copies sounds they hear</p> <p>Cries in different ways to show hunger, pain, or being tired</p> <p>Responds to affection</p>	<p>Copy their sounds back to them</p> <p>Help them learn how to calm themselves by remaining patient and using a soothing voice</p> <p>Hold them and talk to them cheerfully</p>
SIX MONTHS	
<p>Likes to play with others</p> <p>Shows curiosity about things and tries to get things that are out of reach</p> <p>Begins to sit without support</p>	<p>Play on the floor with them as often as possible</p> <p>Point to the object they are reaching for and talk about it</p> <p>Place pillows around them to help them balance</p>
NINE MONTHS	
<p>Makes a lot of different sounds like “mamamama” and “bababababa”</p> <p>May be clingy with familiar adults</p> <p>Crawls</p>	<p>Copy their sounds and words back to them</p> <p>As they move around, try to stay close so they know you are near</p> <p>Put them close to things they like, encouraging them to crawl</p>
ONE-YEAR	
<p>Hands you a book when they want to hear a story</p> <p>Tries to say words you say</p> <p>Looks at the right picture or thing when it's named</p>	<ul style="list-style-type: none"> • Read to them and ask them to participate by turning the pages and identifying the pictures • Talk to them about what you are doing (for example, “I am cleaning the dishes”) • Give them lots of praise when they do something positive

DEVELOPMENTAL MILESTONES

(continued)

MILESTONES	SUPPORT
EIGHTEEN MONTHS	
Plays simple pretend, such as feeding a doll Scribbles on their own Walks alone	Encourage them to use their imagination Draw with them Provide safe areas for them to move around
TWO YEARS	
Copies others, especially adults and older children Shows defiant behavior Repeats words overheard in conversation	Encourage them to help with simple chores Give them praise when they follow instructions and limit praise when they don't Do not correct them when they mispronounce a word; repeat it back to them correctly instead
THREE YEARS	
Carries on a conversation using two to three sentences Follows instructions with two or three steps Turns book pages one at a time	Ask them about their day Give them simple instructions, such as "put your shoes on" Read to them and ask them to repeat words after you
FOUR YEARS	
Sings a song from memory, such as "The Wheels on the Bus" Tells stories Names some colors and numbers	Play their favorite music and sing with them Encourage participation by asking them what they think will happen next Identify colors of things in books and around your home
FIVE YEARS	
Speaks very clearly Uses future tense; for example, "Grandma will be here" Can print some letters or numbers	Ask them to describe what they are doing Teach them concepts such as morning, noon, and nighttime Keep a pencil, paper, and crayons handy to encourage them to write and draw