

Trying  
together

# Contact Information



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# Trying Together

Trying Together supports high-quality care and education for young children by providing advocacy, community resources, and professional growth opportunities for the needs and rights of children, their families, and the individuals who interact with them.

## Newsletter Sign Up

Stay up to date on Trying Together news and events: [bit.ly/receive-emails](https://bit.ly/receive-emails)



# Vision

Trying Together envisions  
a future in which all  
caregivers feel valued.

# Icebreaker

- Write down a memory about a milestone achievement that your child reached, as a caregiver how did that make you feel?

# We Can Do Hard Things

"I see your fear, and it's big.

I also see your courage, and  
it's bigger.

We can do hard things, baby.

We are fireproof."

Untamed by Glennon Doyle



# Goals

- 1.) Familiarize caregivers of young children with how the brain develops.
- 2.) Understanding the impact of interactions, environment, and trauma on a child's brain.
- 3.) Developing an understanding of how strong brain development can be effectively supported through fun and engaging activities.

# Presentation Overview:

Topic 1: Experiences and Interactions

Topic 2: Brain Basics

Topic 3: Environment

Topic 4: Trauma

Topic 5: Support Systems/ A Caregivers Role in Development



# Experiences & Interactions

The brain pathways underlying communication skills are being built early in life, from the prenatal period to about 7 years of age. Active participation in communicating (both talking and listening) during the period of plasticity will provide the child with strong brain pathways for communication skills for the rest of their lives.

Brain research shows that 90% of brain development occurs during the first five years.

# Mother's Speech and a Child's Vocabulary



Dwayne

Dwayne's mother is a hair stylist and she is very talkative. Dwayne hears a lot of speech directed right to him starting at birth.

By 2 years of age Dwayne is expected to have 600 words in his vocabulary.

Both mothers live in the same neighborhood.

Dwayne and Jayden are the same age.

Neither child is experiencing trauma or developmental delays



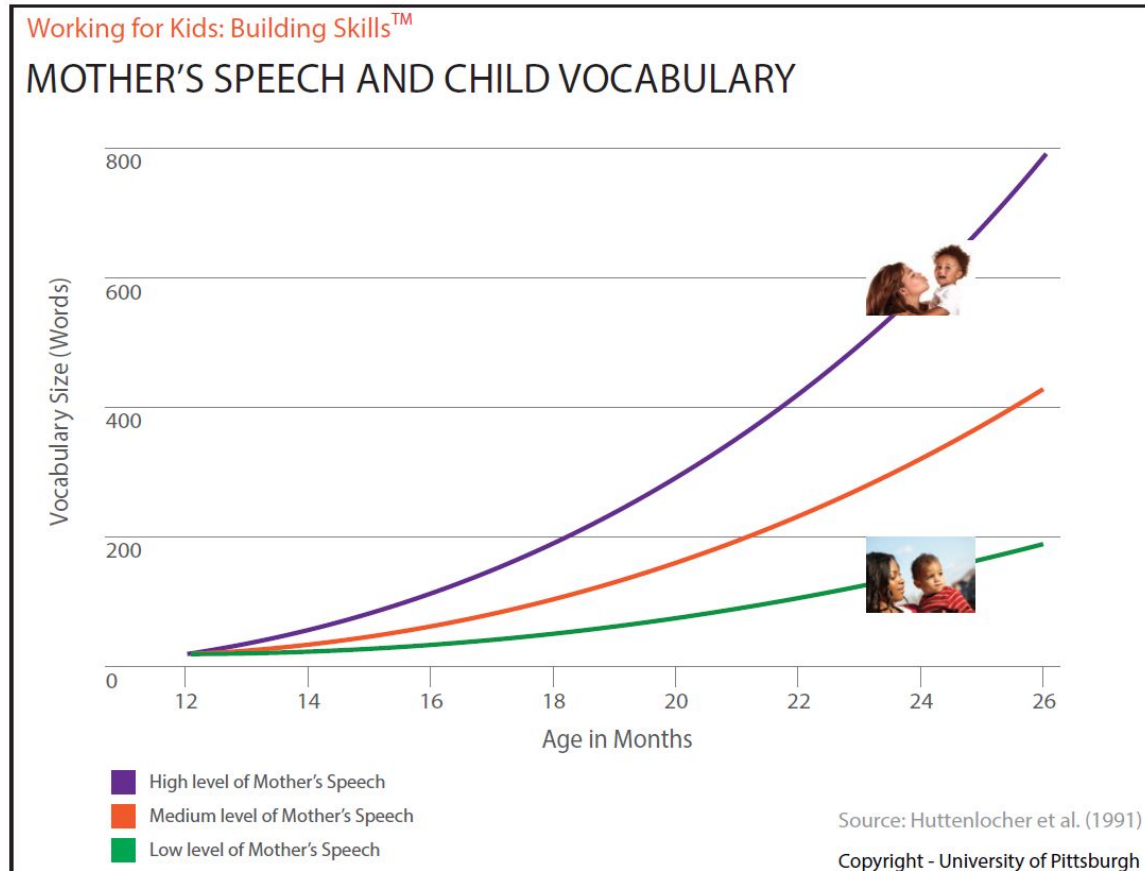
Jayden

Jayden, has a less talkative mother who is a dental hygienist so he has much less exposure to verbal communication in the first 2 years of his life.

Jayden is expected to have about 150 words in his vocabulary at age 2.



# Dwayne and Jayden's Outcomes



Although both Dwayne and Jayden will keep adding words to their **vocabulary**, because Dwayne built stronger brain circuits earlier on, **speaking** will always be easier for him.

- Use of brain circuits after the **plastic period** continues to build the circuits but the process is much slower and never as effective in terms of **building** circuits as during the plastic period.

# Brain Architecture



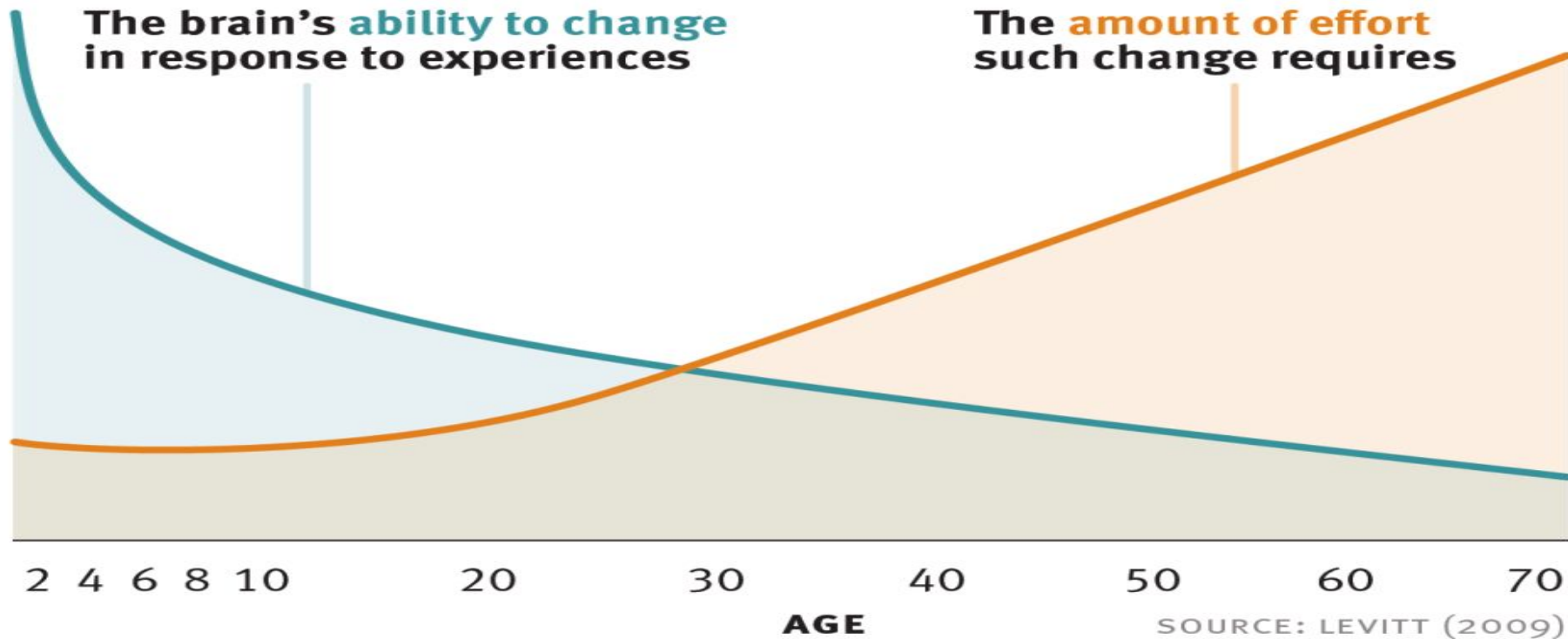
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# Brain Development Overview

- Humans are born with virtually all of the brain cells they will ever have.
  - **Fun Fact**: At birth infants roughly have **100 BILLION** brain cells!!!
- Genes and environment interact throughout brain development
  - Genes **form connections** among major brain regions, while the environment and experience refines the connections: enhancing some connections while eliminating others (neurons are removed or “pruned” away)
- Developmental periods for the brain areas are called the “**plastic period**” (times when the area is most changeable)
  - How strong connections become in a brain area is determined by how much the circuit is used during the plastic period.

# Genes + Interactions shape the brain



Center on the Developing Child  HARVARD UNIVERSITY

[www.developingchild.harvard.edu](http://www.developingchild.harvard.edu)

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# Circuit Areas

Brain cells are programmed to reach out and connect to other neighboring brain cells. These **cells form groups** of related cells that act and develop together, they are referred to as **circuits**.

Visual

Social/ Emotional

Communication

Fine and Gross Motor

Complex Thinking





# Serve and Return



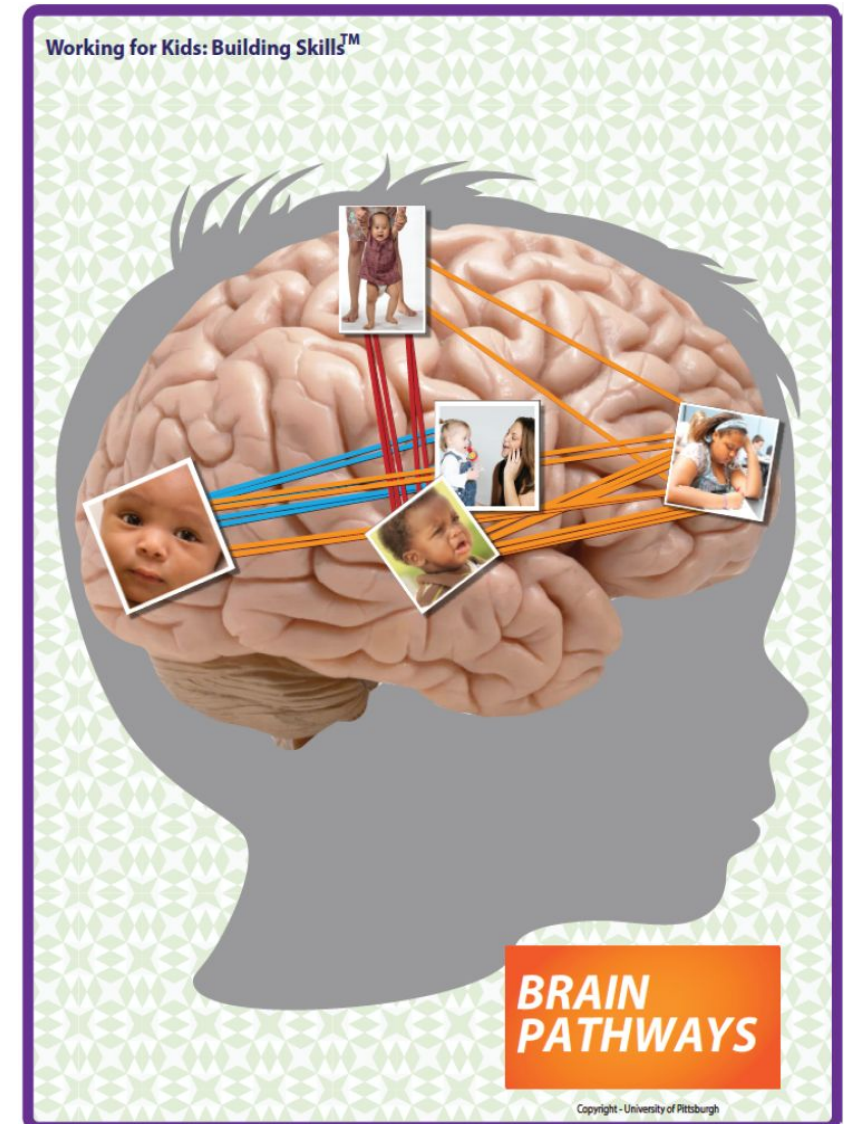


# Let's Make Connections

A strong circuit formed during the **plastic period** will be available for the rest of life. **Circuits can still be formed later in life but they will not be as strong** and building them will require many more repetitions than during the plastic period.

*How can a caregiver build a strong connection between the visual and communication circuit?*

*Do all circuit connections come from good experiences?*



# Environment



A child's environment and experiences play an important role in shaping their brain development.

Supportive environments help children learn new skills. When children are in an environment where they are loved, taken care of, and adults are there to motivate and encourage them, they will be more likely to learn new skills.

# Trauma

An event, or series of events, that overwhelms the central nervous system (brain & spinal cord)

Simply: *trauma is what occurs when your solution (active response to threat) does not work*

## Trauma

- Changes the brain
- Includes “Toxic Stress”, Adverse Childhood Experiences, Etc.
- Activates Survival Instinct (Triggers)

# Toxic Stress

## Types of stress responses

### POSITIVE



**A normal and essential part of healthy development**

#### EXAMPLES

*getting a vaccine,  
first day of school*

### TOLERABLE



**Response to a more severe stressor, limited in duration**

#### EXAMPLES

*loss of a loved one,  
a broken bone*

### TOXIC



**Experiencing strong, frequent, and/or prolonged adversity**

#### EXAMPLES

*physical or emotional abuse,  
exposure to violence*



# The Brain and Toxic Stress

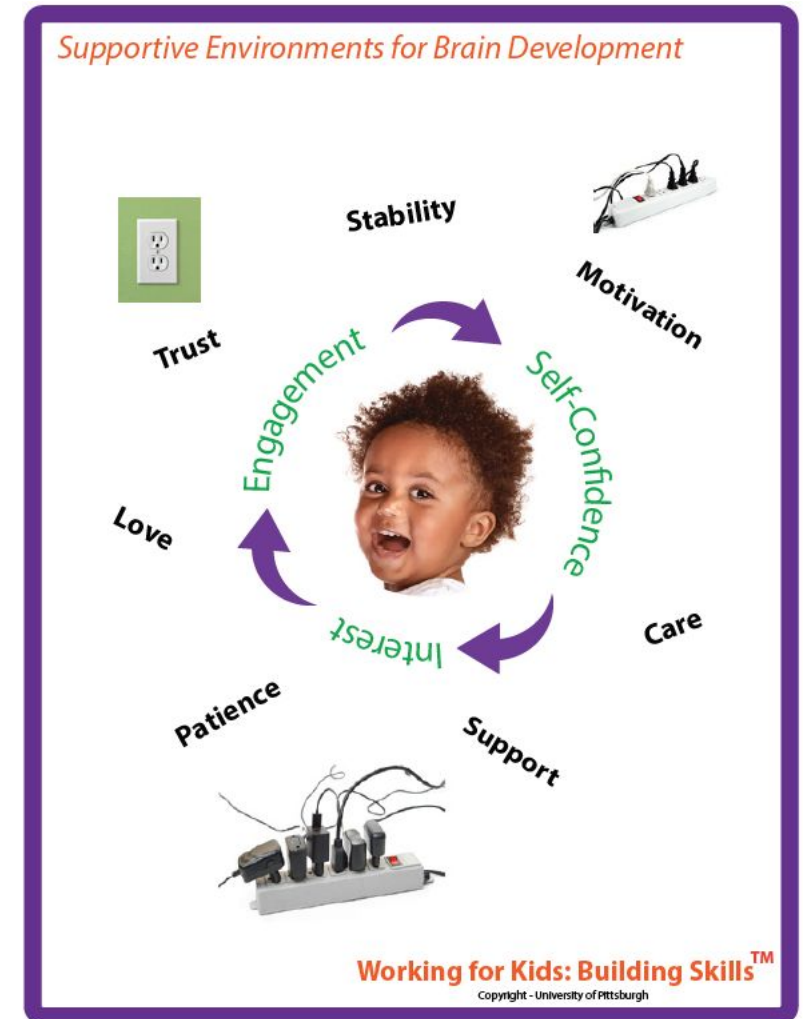




# Cycle of Learning

In order to learn any skill children first need to become **interested** in learning the skill, then to **engage** their own brain circuits in doing the skill. Lastly, they need to develop **self-confidence** in doing the skill so they are willing to repeat it thousands of times to develop strong brain circuits for the skill and to have the courage to progress with learning more difficult skills.

Interest, engagement, and self confidence support a child's cycle of learning



# Support Systems

**Charging Stations:** These are people and places children can go within their community to receive positive support and guidance that will bring them comfort and support their developmental journey.

Parents are not the only ones who can provide support for the child. Support can come from those who serve as charging stations in the community, such as a best friend, a teacher, a coach, etc.

What supportive actions can a charging station take to ensure a child is engaged, interested and building self confidence in their cycle of learning?  
(Be specific and give examples)



# ELRC Region 5

[Early Learning Resource Center \(ELRC\) Region 5](#) provides a single point-of-contact for Allegheny County families, early learning service providers, and communities to gain information and access services that support high-quality child care and early learning programs.





# A Caregivers Role in Development

Caregivers serve as charging stations in every interaction they have with children. Being a positive support is a way to support the learning cycle of each child in your care. Here are some actions that can help facilitate supportive learning environments for young children...

- DAP
  - Serve and Return
- Culturally Responsive Environments
- Family and Community Partnerships
  - Health and Safety
  - Play



# Be An Advocate

## Start Strong PA

Advocate for affordable high-quality child care: [startstrongpa.org](http://startstrongpa.org)

## Pre-K for PA

Advocate for increased access to high-quality pre-k: [prekforpa.org](http://prekforpa.org)

## Childhood Begins at Home

Advocate for evidence-based home visiting: [childhoodbeginsathome.org](http://childhoodbeginsathome.org)

## Support Our Public Policy Agenda

Receive advocacy alerts right in your inbox: [bit.ly/advocacy-alert](http://bit.ly/advocacy-alert)



# More Resources from Trying Together

**Allegheny Child Care** - [www.alleghenychildcare.org](http://www.alleghenychildcare.org)

**Early Learning Resource Center Region 5** - [elrc5.alleghenycounty.us](http://elrc5.alleghenycounty.us)

**The Homewood Early Learning Hub & Family Center** -  
[www.tryingtogether.org/community-resources/hub-and-family-center](http://www.tryingtogether.org/community-resources/hub-and-family-center)

**Developmentally Appropriate Parenting (DAP) Series** -  
<https://tryingtogether.org/parenting-resources/>

# Share Your Feedback!

**Fill out this survey to receive DAP  
Series cards via mail -  
<http://bit.ly/parentingtogether>**



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# Resources

University of Pittsburgh. (2016). Working for Kids: Building Skills. Retrieved 2020, from

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Retrieved 2020, from <https://empoweringeducation.org/defining-trauma/>

**Thank you.**

