

**Build the Brain When it Counts Series:  
Stimulate Literacy Development with Enriching  
Experiences**

**AbleNet University  
Webinar  
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# Focus of Session

- ❑ You will gain skills in using steps and strategies
  - ❑ To stimulate the growth of young learner's communication, language and literacy skills to advance their academic and school success.
- ❑ This session will illustrate:
  - ❑ How to design and deliver a variety of enriching literacy experiences to spark children's sense of wonder and advance their executive function and critical creative thinking skills.
  - ❑ A popular children's book will serve as the enabling tool.

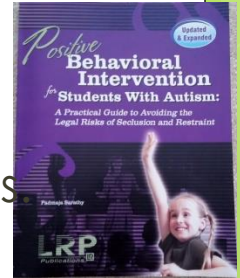


# Author & Educational Consultant

Author of multiple books and products (Website: [www.infinitepossibilities-sped.com](http://www.infinitepossibilities-sped.com))

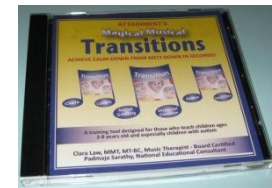
## **Positive Behavior Strategies for Students with ASD:**

A Practical Guide to Avoiding the Legal Risks of Aversives  
Publisher: LRP Publications, ([www.shoplrp.com](http://www.shoplrp.com))



**Autism Spectrum Disorders: Seven Steps of Support** (A quick reference guide) Publisher: National Professional Resources, Inc. ([www.nprinc.com](http://www.nprinc.com))

**Magical Musical Transitions** – A Music CD for assisting children with Autism Spectrum Disorders  
Marketed by [www.nprinc.com](http://www.nprinc.com))



## **Paraeducator Training DVD and Trainee Manual**

Includes a training unit on autism spectrum disorders Publisher: Legal Digest ([www.ed311.com](http://www.ed311.com))

# Books and Products

- ❑ **Serving Students with Severe and Multiple Disabilities: A Guide to Strategies for Successful Learning** (Publisher: LRP Publications, [www.shoplrp.com](http://www.shoplrp.com))
- ❑ **From Early Intervention... to Preschool Program... and School-Age Services: A Parent's Guide** (Publisher: LRP Publications, [www.shoplrp.com](http://www.shoplrp.com))
- ❑ **Together We Succeed: Building a Better System for Transitioning Preschoolers with Disabilities** (Publisher: LRP Publications, [www.shoplrp.com](http://www.shoplrp.com))
- ❑ A couple of books are to be released later in 2016.



## Participant Poll

- Pre-kindergarten Teacher?
- Early Childhood Special Education Teacher?
- Kindergarten Teacher?
- Occupational/Physical Therapist?
- Speech Pathologist?
- Administrator?
- Parent?

# Executive Function Skills

## What are Executive Function Skills?

- ❑ Executive function skills allow us to retain and work with information in our brains, focus our attention during a particular activity, filter distractions, and switch mental gears.
- ❑ Executive function and self-regulation skills provide critical supports for learning and development – both cognitive and social capacities.
- ❑ Grows at a fast pace during the early childhood period, from 3-5 years of age.
- ❑ There is emerging evidence that executive function skills contribute to early reading and math achievement during the pre-kindergarten years and into kindergarten.

(Center on the Center on the Developing Child at Harvard University, 2011, 2014).

# Executive Function Skills

(continued)

- ❑ There are three basic dimensions of these skills:
  - ❑ **Working memory** — The ability to hold information in mind and use it.
  - ❑ **Inhibitory control** — The ability to master thoughts and impulses so as to resist temptations, distractions, and habits, and to pause and think before acting.
  - ❑ **Cognitive flexibility** — The capacity to switch gears and adjust to changing demands, priorities, or perspectives.

Center on the Developing Child at Harvard University (2014).  
Retrieved from [www.developingchild.harvard.edu](http://www.developingchild.harvard.edu).

# Six Domains of Pre-literacy Development

- Research on the literacy development of young children indicate that there are 6 domains of early literacy development.
  - Phonological awareness
  - Print awareness
  - Alphabetic Awareness/Letter knowledge
  - Comprehension skills
  - Written Language
  - Oral language



# A Language-rich Environment

## Story Reading and Story-telling Strategies

- Use a **serve and return** model to engage and sustain children's attention during story reading/telling.
- **Use story-telling to build attention, imagination and vocabulary Skills.**
  - Select stories with simple themes, with rhymes and predictable phrases for a rich story-telling experience.
  - Story-telling enables children to draw the pictures in their minds, visualize, recall details and increase focus and attention.

# Story-telling Strategies

- **Encourage children to tell stories** (practice holding and manipulating information in working memory).
- Provide them with a puppet and encourage them to use it as a prop to make up a story.
  - The story may be just be a few sentences/ phrases.
  - Builds focus and attention.
  - Requires drawing from prior knowledge strengthening working memory
- When they draw a picture that tells a story, write their stories down. Read it to them.

# Scaffolding Language Development

- During 'Story-Time' (Read –Aloud Session);
  - Ask open-ended questions.
  - Encourage children to define and describe things in a precise manner (What is another word for it?).
  - Provide adequate wait time for students to respond.
- Label 'Centers' and post words associated with the center (e.g., Art Center: paint, brush, paper, etc.).
  - Pair picture supports with the words.
  - Post learning objectives next to the center as a reminder (to help address IEP objectives).
- Create a 'Word-Wall' that children can see at their eye-level. (Pair with pictures/objects as needed).
  - Limit the number of words at a given time, regularly changing the words every 3-4 weeks.

# A Toolkit of Ideas to Cultivate Executive Function and Cognitive Skills

## **Book of Choice for the Framework**

Chicka, Chicka Boom, Boom?

By Jr.

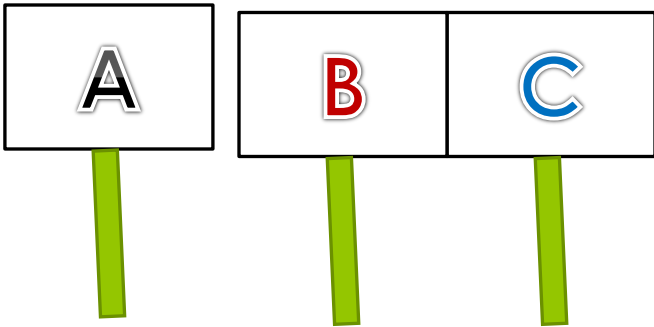
A picture book is used as the focal point to design and offer a number of enriching literacy and other activities to stimulate language and vocabulary development while cultivating critical and creative thinking skills.

# Before Reading

- **Assemble materials ahead of time:**
  - Story props: Letters on index cards attached to craft sticks
  - photographs/picture cards/Felt pictures of
  - Any assistive technology voice output devices needed
- **Set the stage for enjoying the book.**
  - Show the cover and the title of the book.
  - Get the children involved in the book through **questioning strategies.**
    - Frame your questions from simple (yes/no responses) to complex (open-ended) questions.

# Props and Supports

Alphabet cards

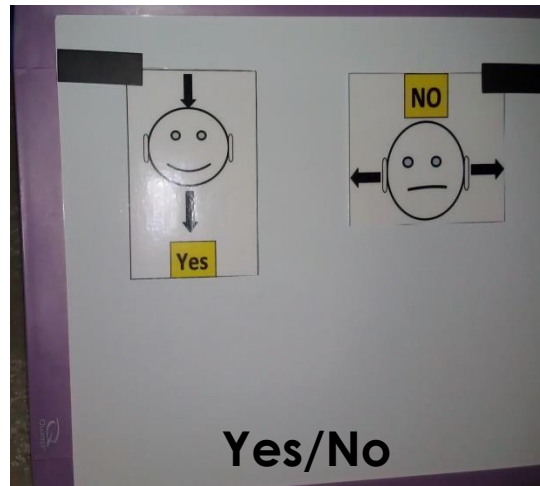


Motor Support

Counting objects attached to slant board



Story prop



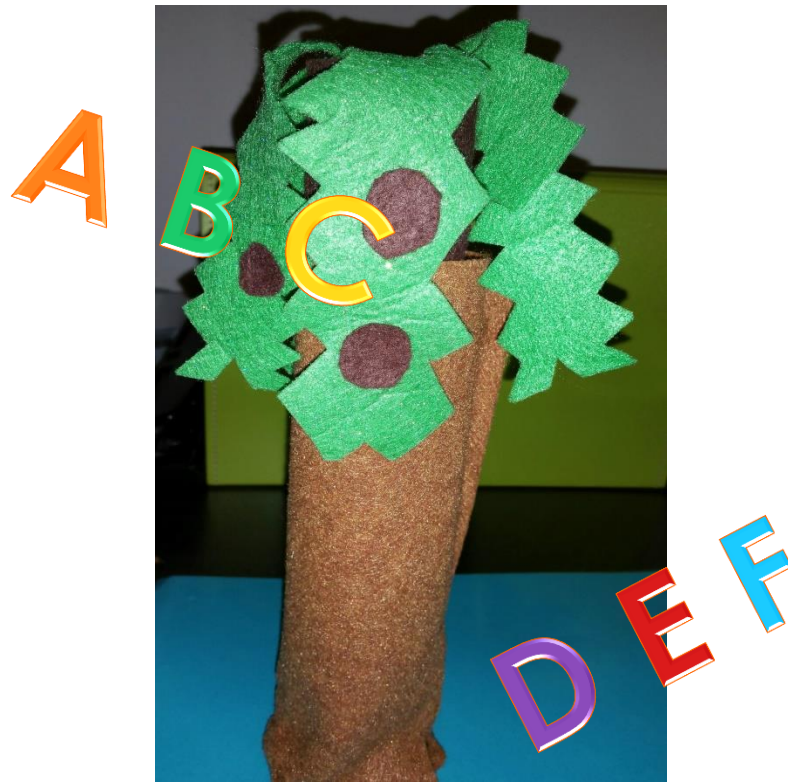
Yes/No



Happy/sad

# Chicka, Chicka Boom Boom

<https://www.youtube.com/watch?v=4QdN-HYp46c>

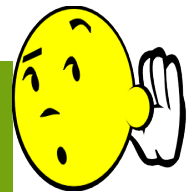


# Build Attention, Working Memory and Inhibitory Control During Story Book Reading

- Lead the children in a discussion about the book.
- Pass out the props to each of the students.
- Prepare them in advance for what to expect – they have hold up their letter and show it to the class.
- Ask multi-level questions (to address students functioning at different levels) to offer opportunities for all children to be included and feel successful in the story-discussion.



## Tune in...Talk More...and Take Turns



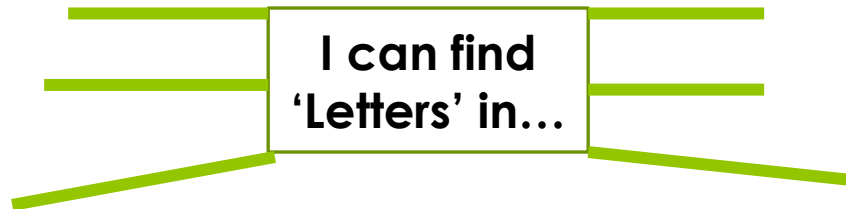
- Ensure that the related learning objectives are addressed during the activity.



# Questioning Strategies

**Promote Attention, Working Memory and Critical Thinking. Ask multi-level questions.**

- ❑ Have you seen letters before? (recall, attention)
- ❑ Where would you see letters? (working memory, making connections, critical thinking)
- ❑ Create a brainstorming chart as children name the places.



- ❑ Use object representations or picture cues as supports to assist students with their responses.
- ❑ Link objects and experiences with abstract concepts to strengthen working memory as well as attention.

# During Story Book Reading

- Point out the repetitive chant as you read the book.
- Pause during reading to have children predict the letters that will be coming up next to climb the tree.

## **Ask easy recall to complex critical thinking questions:**

- Have you seen a coconut tree? (recall) Where can you usually see a coconut tree? (a challenge question requiring higher general knowledge, working memory)
- Do you think there will be enough space for all the letters on the tree? (Yes/No)
- What do you think is going to happen to the tree? (critical thinking)
- When moon comes up, is it day time/night time? What else would you see at night in the sky? (working memory, making connections)

# Child-specific Supports

- ❑ Ask questions ranging from higher to lower complexity levels to provide opportunities for children with diverse abilities to respond to questions and experience success.
- **Easier complexity level questions/tasks:**
  - Point to letters or name letters (given limited 2-3 choices)
  - *Reach and grasp an object (Letter/coconut tree/ picture).*
  - *You see moon at night/day (given 2 picture choices)*
  - *Attend to story being read (5-7 minutes of attending to story).*
- ❑ Provide invisible support.
- ❑ Build in transition activities (movement activities, games, songs, etc.) to sustain student motivation and attention.
- ❑ Offer opportunities to take short breaks if needed.
- ❑ Make encouraging comments .

# Language-Literacy Building Activities

- **Point out the repetitive pattern** in *Chicka Chicka Boom Boom*. Encourage children to participate in choral reading, once they become familiar with the books' structure and pattern.
- **Use musical instruments to liven up the story.** Children can shake or jingle an instrument for the repeated part/phrases of the story: 'Chicka Chicka Boom Boom' 'Will there be enough room?'
- **Letter March:** Have children march around the classroom holding up their letters while chanting 'A told B and B told C,...Chicka Chicka Boom Boom.
- **Make a Book** using power point slides.
  - Names paired with photo on the cover and their favorite letters (4-6) matched with words on the inside.

# Play Games to Promote Cognitive Flexibility

- ❑ **Play Guessing Game (A Letter/A Word/A Name).**
  - ❑ Describe an object, a person or make the initial sound for students to guess what it is.
    - ❑ “I am thinking of... (describe two features) What word is it?”
    - ❑ “I am thinking of... (describe two attributes) Who is it?”
    - ❑ “I am thinking of... (make the initial sound) What is the word?”
  
- ❑ **Play the ‘Letter Hunt’ musical game.**
  - ❑ **Students hunt for the named letters** singing ‘We are going on a Letter Hunt (to the tune of ‘We are going on a Bear Hunt’)
  
- ❑ **Construct, create and play letter/word Bingo game.**
  - ❑ Adaptation: Provide picture cues for children experiencing difficulty in naming the word/letter or can point to one of the pictures from 3 choices given.

# Foster Working Memory, Critical Thinking and Problem-solving with Math

- Counting fun
  - How many letters in the alphabet? How do we find out? (Allow diverse responses/predictions.)
  - Count the letters in the names (Who has the most letters in their name/least letters in their name?)
- Measurement - Involve students in learning and practicing measurement concepts and the vocabulary associated with it:
  - Identify tall/short/medium (find tall, short & medium trees during 'nature hunt' )
  - Measure height/width of items, problem solve how to fit items in a given box, make comparisons.

# Stimulate Curiosity and Creative Thinking With Science Inquiry

- ❑ Grow name or choose one letter (soil & grass seeds).
- ❑ Go on a 'Nature Hunt' in the school yard
  - ❑ To investigate presence of palm trees (with fronds)
  - ❑ identify other kinds of trees
  - ❑ Name parts of trees (trunk, branch, leaves, roots)
- ❑ Look for the 'sun, moon and stars' in the sky as you go outside to check the weather (daily for calendar).
- ❑ Investigate concepts of daytime/night time (sunrise/moonrise, solar system)
- ❑ Set up a Science Challenge Discovery Center:  
Expose learners to inquiry-based science activities.

# Use Creative Arts – Dramatic Play and Build Cognitive Flexibility

- ❑ Stimulate imagination and creativity while increasing vocabulary, communication and social interaction.
- ❑ Role play and drama engage children socially, emotionally and intellectually when they are having fun.
- ❑ Make 'Letter' crowns (hats) to use for movement/song activities.
- ❑ Play 'Musical Pairs'
  - ❑ Find the partner with matching letters or consecutive letters pairing and moving/dancing together.
- ❑ Role play coconut tree and letters marching towards it.
- ❑ Through performing physical actions, children will be able to visualize and recall letters (strengthens working memory)



# Interactive Learning Centers

- Design interactive 'Learning Centers' with multi-sensory features.
- Focus on the following content/domain areas and themes:
  - **Literacy Skills** (Language/communication)
  - **Math Center**(Counting, Sorting, Measurement skills, Problem-solving activities, etc.)
  - **Science Center** (investigation of nature items, concepts of time of day – night time/day time, Sun, Moon, Stars,, etc.)
  - **Art Center** (Felt and foam shapes and bits, variety of brushes and textured paper, seeds, leaves, stamps, craft sticks, etc.)
  - **Dramatic Play Center** (costumes, crowns,
- Post learning objectives at the Learning Stations.

# Awaken the senses!

**Integrate the different senses during planned literacy activity.**

## Visual and Auditory

See the pictures.  
See and hear the words.

## Tactile

Touch and hold story props.  
Plant seeds to grow names.  
Create textured names.

## Visual, Tactile and Kinesthetic

Role play letter teams.

Writing: create Student-authored book

## Gustatory and Olfactory

Take a nature walk.  
Smell flowers, seeds, leaves  
Tree, etc.

## Auditory and Kinesthetic

Use musical instruments to go with the story chant.  
Engage in dramatizing the story of 'Chicka Chicka Boom'

# Books to Sustain Attention and Focus

- ❑ The books listed below help with:
  - ❑ vocabulary development
  - ❑ Encourage curiosity
  - ❑ Cause and effect thinking
  - ❑ Problem solving strategies
  - ❑ Connecting with prior knowledge and experiences.
  - ❑ Engage and sustain attention and focus
- ✓ If You Give a Mouse a Cookie by Laura Numeroff
- ✓ Goldilocks and the Three Bears by James Marshall
- ✓ Seven Blind Mice by Ed Young
- ✓ It Looked Like Spilt Milk by Charles Shaw
- ✓ Papa, Please Get the Moon for Me by Eric Carle
- ✓ Seven Little Rabbits by John Becker

# Helpful Videos and Website

## Creating A Language-rich Environment

- **Scaffolding Language Development:** *This video clip demonstrates approaches to scaffolding language learning in the classroom.*  
<https://www.youtube.com/watch?v=gLXxcspCeK8&list=PLhwy3q7CvmVHqH-sLII-z6A7AB4ji0vvq&index=2>
- **Supporting the Oral Language Development of Young Dual Language Learners:** *Linda Espinosa's PowerPoint presentation highlights the when and how of supporting young DLLs.*  
<http://www.youtube.com/watch?v=5HD2wydP0mE>
- **Center for Early Literacy Learning (CELL)**  
*The Center for Early Literacy Learning (CELL) offers a variety of resources to promote the adoption and use of evidence-based early literacy learning practices. They include downloadable practice manuals, including manuals that address adaptations for children of diverse abilities, video clips, family resources, and other materials.* <http://www.earlyliteracylearning.org/>
- **Teach Children Music - Skipping a Beat & Developing Gross Motor Skills** <https://www.youtube.com/watch?v=9QxM9iarITQ>

# Resources

- ❑ Center on the Developing Child at Harvard University (2011). *Building the Brain's "Air Traffic Control" System: How Early Experiences Shape the Development of Executive Function: Working Paper No. 11*.  
<http://www.developingchild.harvard.edu>
- ❑ Center on the Developing Child at Harvard University (2014). *Enhancing and Practicing Executive Function Skills with Children from Infancy to Adolescence*. Retrieved from [www.developingchild.harvard.edu](http://www.developingchild.harvard.edu).
- ❑ ThinkFun: [www.thinkfun.com](http://www.thinkfun.com)
- ❑ Tools of the Mind: [www.toolsofthemind.org](http://www.toolsofthemind.org)

# The Forthcoming Webinars:

## **The next webinar in the Build the Brain When it Counts Series**

Topic : Nurture Social-emotional Domain with Positive Behavioral Approaches

**October 17<sup>th</sup>, 2016 (11 AM to 11:45 – CDT)**

## **The next webinar in the Paraeducator Series:**

Topic: The Three Ps for Behavioral Support: Preventive Strategies, Personalized Supports and Positive Strokes

**September, 29, 2016 (11 AM to 11:45 – CDT)**



**Thank You Everyone!**  
**A special thanks to AbleNet University**  
**for hosting the webinar.**

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