



## **BBT Frequently Asked Questions:**

### **What is Building Brains Together (BBT)?**

Building Brains Together is an organization created by Dr. Robbin Gibb, Dr. Claudia Gonzalez, and Dr. Noella Piquette, that is run through the Neuroscience Department at the University of Lethbridge. The goal of Building Brains Together is to increase executive functions in children through play, while providing parents with the information and resources they require in order to achieve this at home.

### **What are executive functions?**

Executive function is the term that is given to a set of top-down neurocognitive processes responsible for self-regulation of thoughts and behaviours. There are three main neurocognitive processes executive functions are normally broken down into: working memory, inhibitory control and cognitive flexibility.

Working memory refers to the mental manipulation of information aimed at guiding behaviour. Inhibitory control is the ability to suppress attention, overlook distractors, inhibit impulses, and act/speak in an appropriate way. Cognitive flexibility is the ability to switch your attention between different tasks, perspectives or strategies.

### **Why are executive functions important?**

Executive functions are critical for long term psychological and social development. Measures of executive functions in early childhood predict outcomes in health, wealth, and criminality nearly thirty years into the future. Additionally, executive functions skills are proven to be more important for academic success than IQ or entry-level math or reading abilities.

### **Why is play important?**

Playing throughout childhood has proven to be extremely important for brain development. Playing with a child is one of the best and easiest ways to increase the development of executive functions. Studies have shown that periods of free play increase social skills and inhibitory control. Actively engaging with a child during play helps to increase attention control, goal directed behaviour, long term memory retrieval, and stress regulation.

### **How can I help my child develop executive functions?**

Through play! Building Brains Together has developed a curriculum of simple games which focus on increasing the development of executive functions in children. The link below provides 10 games you can play with your child, and how each game helps executive function skills.

[www.buildingbrains.ca/resources](http://www.buildingbrains.ca/resources)

### **When/where can I attend a Building Brains Together event?**

All the events that Building Brains Together will be attending can be found at

[/www.buildingbrains.ca/events](http://www.buildingbrains.ca/events)

### **What can I expect at a Building Brains Together event?**

At a Building Brains Together event, our main goal is to provide parents with information and resources. You can look for our bright yellow tent, which typically has toys/games for children to play while our staff answer questions parents might have about Building Brains Together, executive functions, or our curriculum of games. Occasionally we give out free Brain Building Bags, which contains infographics describing each game, the tools you need to play each game, a few extra play accessories and more.

### **What if my child is not 3-5 years old?**

Although we currently have games for preschool aged children between the ages of 3-5, we are working on a curriculum for children of all ages. These curriculums will be split up into age categories of 0-2, preschool, 6-8, and 9-12. Check <http://www.buildingbrains.ca/resources> for the most up to date information and materials.

### **What is the purpose of Building Brains Together?**

Our purpose is to enhance kindergarten readiness, academic and life success by strengthening executive function, self-regulation and early literacy skills in preschool aged children. As well as to build adult (parent, caregiver, educator) capabilities around brain development, executive function skills and early literacy

### **What does Building Brains Together do?**

Building Brains Together shares a tested curriculum of games that have demonstrated effectiveness in strengthening executive function, self-regulation and early literacy in preschool-aged children and up. BBT hosts workshops and training events for parents, caregivers, educators and community members on topics such as early brain development, executive function skills and early literacy. BBT is active in the community of Lethbridge partnering with many local organizations to connect with caregivers and share the BBT Executive Function Curriculum.

### **What Are the Executive Functions that These Games Help Build?**

- ***Inhibit:*** Ability to control impulses (inhibitory control) and to stop engaging in a behaviour
- ***Shift:*** Ability to move freely from one activity to another; to tolerate change; to switch or alternate attention.
- ***Emotional Control:*** ability to regulate emotional responses appropriately.
- ***Initiate:*** Ability to begin an activity and to independently generate ideas or problem-solving strategies
- ***Working Memory:*** Ability to hold information when completing a task, when encoding information, or when generating goals/plans in a sequential manner
- ***Plan/organize:*** Ability to anticipate future events; to set goals; to develop steps; to grasp main ideas; to organize and understand the main points in written or verbal presentations.
- ***Organization of Materials:*** Ability to put order in work, play and storage spaces (e.g., desks, lockers, backpacks, bedrooms.).

- **Monitor:** Ability to check work and to assess one's own performance; ability to keep track of the effect of one's own behaviour on other people

### ***What is Emergent Literacy?***

Emergent literacy begins at birth and continues through the preschool years. Emergent literacy skills are everything children know about speaking, listening, reading and writing before they can actually read and write. Being able to communicate and to take in communication is a crucial developmental skill that is necessary in all aspects of one's academic and social life. Children start to learn language from the day they are born. As they grow and develop, their speech and language skills become increasingly more complex. They learn to understand and use language to express their ideas, thoughts and feelings and to communicate them with others

### ***What Are Emergent Literacy Skills?***

- **Concepts about print:** Understanding that written language has meaning. Connecting speech sounds to print/decoding, noticing environmental print [signs and logos], differing print, handling books, and following pictures/words on a page.
- **Print motivation:** Being interested in and enjoying text, including books.
- **Oral language:** The ability to produce and comprehend spoken language; includes listening comprehension, vocabulary, and grammar.
- **Rapid naming of letters and digits:** Recognizing and identifying individual alphabets and numbers.
- **Rapid naming of objects and colors:** Recognizing and identifying common items and basic colors.
- **Writing/drawing:** Scribbling, drawing, uses of space and attempts at creating words or meaning with a variety of writing tools.
- **Vocabulary:** Receptive vocabulary - Knowing the names of things; words needed for understanding what is heard and read. Expressive vocabulary –Words used for speaking and writing.
- **Narrative skills:** Being able to describe things and events and to tell stories.
- **Alphabet knowledge:** Understanding letters are distinct symbols, are different from each other, knowing their names and sounds, and recognizing letters everywhere
- **Phonological awareness or sensitivity:** Being able to hear and play with the smaller sounds in words.