

Making Neuroscience Fun

A Brain Awareness Program for All Ages



Brain Health: It's SPECTacular

Story General Information

Why Can't I Remember? (🧠 A Cognitive Health Story) (3rd Grade- 8-9 yrs.)

This story describes why we need to learn and remember and why it is better to use and apply information that you learn, rather than just memorize information.

- Learning and remembering are behaviors that work together. Humans have the ability to learn more than other animals, because we have the ability to read and write. This means we do not have to remember everything.
- As humans, we need to learn about some things that we will need to use all the time, other things we learn teach us how to think and communicate.
- When you think about something that you have learned, you move the information around in your brain and you strengthen the connections in your brain that help you to remember that information. Because we are all different, figuring out how you can do this will help your brain stay healthy.

The facilitator begins by introducing themselves, neuroscience, and the program: Brain Health: It's SPECTacular. They explain the **C** in SPECTacular represents Cognitive Health. In this story, children discover the importance of learning new information and how really learning and understanding is different from just memorizing content.

Everyone has a brain and it is always changing. The brain is constantly doing three things: learning, remembering, and forgetting. The world or environment someone lives in affects those three brain functions. What one person needs to learn and remember is different from each person around them. Sometimes it is necessary to forget learned information that is no longer needed.

In third grade, there is a shift from learning how to read and write to using reading and writing to learn new information. There are many ways to learn new information and every person learns differently. The facilitator emphasizes the significance in figuring out how to best learn. Typically how someone best learns is also the most enjoyable to them. It brings them satisfaction and pride. The sooner someone identifies how they learn best, the happier and healthier their brain will be!

Application of new knowledge is a key factor in retention and truly learning information. By using new information in different ways, the brain's connections for storage and retrieval are strengthened. The facilitator explains this concept by discussing a couple scenarios from learning the spelling of new words to fractions in math. Exposure, relevance, and making it fun are all integral for children to really learn new information. The facilitator and children discuss different methods of learning. They also talk about how someone learns math might differ from how they learn new words, science, or history. The facilitator describes the *multiple sensory system* and its role in learning.

What happens when someone is tasked with learning information they find boring or hard? They can utilize the methods they have found that make learning more enjoyable. It is also healthy to have the mindset that

learning this information could be more about the actual task of learning rather than the content. Learning how to learn prepares people for future learning. The facilitator encourages the children to find relevance in the content too. Development of technology may sound boring, but when looked at through the lens of video games, it could spark more interest!

Memorizing information is different than truly learning it. With memorization, the brain is not growing and developing; however, when learning new content there is thinking and understanding involved which allows the brain to change. Information is learned through practice. Practice takes time. Practice can be homework, projects, or exams. Sleep is also important to learning. The brain makes connections during the sleep. Strong connections means the brain is learning.

So why should someone go to school? The facilitator explains how school helps children discover the best way to learn for themselves. School should encourage learning through different methods and not just memorization. School should have people, like teachers, to help children identify their talents and how those can help them learn new information.

The world is constantly changing and the brain needs to change too. Change occurs through learning, remembering, and forgetting. Understanding how to learn best and the importance of reading/writing can improve Cognitive Health, which is an important component of a healthy and happy brain.

Story Objectives:

- Students will describe the job of the brain.
- Students will recognize and identify multiple ways to learn information.
- Students will explain how learning math can be different from learning language.
- Students will explain how memorization is different from learning/understanding information.
- Students will describe how using information frequently helps in the learning process.
- Students will explain how sleep improves learning.
- Students will identify beneficial reasons for school.
- Students will describe how they best learn may be different from their peers.
- Students will explain how understanding and learning new information is important to their Cognitive Health.