



Science Behind the Story (SBS)
The SPECTacular Way to Take Care of Your Brain (🌈 A Brain Health Story)
(1st Grade- 6-7yrs)

This story emphasizes the importance of a healthy brain, and ways to keep one's brain healthy.

- 🌈 You brain helps you to do lots of things. As your brain grows, so do the things that you can do.

All animals need a brain to do all the behaviors that they do to stay alive, such as eating, drinking and sleeping (Barrett, 2018). People also need their brain to do all the behaviors that they do, that animals do not, such as talking with friends and family or learning how to read and write.

As the brain develops, the number of behaviors that people can do increases; this is exemplified with language (Sakai, 2005). Infants are able to make sounds, but as the child grows then the sounds are put together to make words. As the child's brain grows, then the words are put together into sentences which relay complex ideas.

- 🌈 Taking care of your brain to keep it healthy is SPECTacular.

As our brain is so important for our health and well-being, it is important for us to take care of our brain to keep it healthy. Children will learn an easy way to remember how to take care of their brains by remembering that brain health is SPECTacular.

The S stands for social health. This is described as understanding that there are some things that the child will be able to do and some things that their friends will be able to do. The reason for the difference has to do with the neural circuits of the social brain areas (DeMayo, 2019). Understanding this concept will allow the child to be more forgiving of themselves and others. It will also allow them to make good decisions about trying to do behaviors that their brains are not ready for them to do yet.

The P stands for physical health. This means that your brain needs energy, sleep and for you to move your body (Hosker, 2019; Belcher, 2020). All of these things will help keep your brain physically healthy.

The E stands for emotional health. This means that understanding that it is ok to feel lots of different emotions, but trying to be happy will help your brain stay healthy because it activates the reward pathway – or the “happy” part of your brain (Di Chiara, 2007; Breedlove, 2017).

The C stands for cognitive health. Your brain is healthy when you are learning and remembering things about the world around you (Hillman, 2015).

- 🌈 If you take care of your brain, your brain will take care of you.

When your brain is healthy, then you feel SPECTacular and you can do all the behaviors that you need and like to do.

National Standards:

Next Generation Science Standards

- Crosscutting Concepts:
 - **Structure & Function:** The way an object is shaped or structured determines many of its properties and functions.
 - The shape and stability of structures of natural and designed objects are related to their function(s).
 - **Cause & Effect:** Events have causes, sometimes simple, sometimes multifaceted. Deciphering causal relationships, and the mechanisms by which they are mediated, is a major activity of science and engineering.
 - Events have causes that generate observable patterns.
 - **Stability & Change:** For both designed and natural systems, conditions that affect stability and factors that control rates of change are critical elements to consider and understand.
 - Things may change slowly or rapidly.
 - Some things stay the same while other things change.
- Related Grade Level Content
 - **1-LS1-2: Patterns in behavior to survive**

ASCA (American School Counselors Association):

Academic Development

- **Standard A:** Students will acquire the attitudes, knowledge and skills that contribute to effective learning in school and across the life span.
 - A:A1 Improve Academic Self-Concept
 - A:A1.1 Articulate feelings of competence and confidence as learners
 - A:A1.2 Display a positive interest in learning
 - A:A1.3 Take pride in work and achievement
 - A:A1.4 Accept mistakes as essential to the learning process
 - A:A1.5 Identify attitudes and behaviors that lead to successful learning

Personal/Social Development

- **Standard A:** Students will acquire the knowledge, attitudes and interpersonal skills to help them understand and respect self and others.
 - PS:A1 Acquire Self-knowledge
 - PS:A1.1 Develop positive attitudes toward self as a unique and worthy person

National Health Education Standards (Shape America) & CDC (Centers for Disease Control and Prevention)

- **Standard 1:** Students will comprehend concepts related to health promotion and disease prevention to enhance health.
 - 1.2.1: Identify that healthy behaviors impact personal health. **(CDC)**
 - 1.2.2: Recognize that there are multiple dimensions of health. **(CDC)**
- **Standard 4:** Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.
 - 4.2.1: Demonstrate healthy ways to express needs, wants, and feelings. **(CDC)**

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