



**Science Behind the Story (SBS)**  
**I Can Handle It...I Got It (🌈 A Social Health Story)**  
**(4<sup>th</sup> Grade – 9-10 yrs)**

This story talks about how to come up with ways to handle challenges that you face.

- 🌈 You need to understand when you are in “over your head”.

Facing challenges on a day to day basis is part of life for all animals and these challenges can be stressful. When your brain senses a challenging situation, it activates the sympathetic nervous system (Kemeny, 2003). The sympathetic nervous system, also known as the fight or flight system, is part of the autonomic nervous system which is designed to get your body ready to handle challenges that come your way (Kemeny, 2003).

When the sympathetic system is activated, your heart pumps faster, your breathing is increased and your senses are heightened (Breedlove,2020). These responses are a good thing, getting you ready to handle challenges head on (Sapolsky, 2015; McEwen, 2015). But, when this system is activated for too long a period of time, it can damage both your body and your brain (Sapolsky, 2015; McEwen, 2015). At this point, you are “stressed out”.

The first thing that is needed is the ability to identify when you are stressed out. The second thing is to identify the challenge that caused your stress. Both of these will help you from feeling that you are “over your head”.

- 🌈 Coping mechanisms are things that you can do to handle challenging situations. (COPE – Choose Our Personal Escape)

Once you have identified things that you find challenging, then you figure out how you can best deal with the situation. Developing resilience, which is the ability to cope with stressors, will facilitate this (Holz, 2020).

Resilience depends on your sense of self and being able to identify your strengths and weaknesses (Andrews, 2021). It may help to talk to someone in your support system to help you to identify these traits (Andrews, 2021). Then you need to find strategies that you can use to help deal with the challenging situation.

Taking control of the challenging situation allows the brain to operate more efficiently in the face of adversity and thus to maintain emotional and behavioral control in order to actively cope with enduring stress exposure (Andrews, 2021).

- 🌈 Different coping mechanisms work for different challenges.

Once you have come up with your coping mechanisms, it is important to realize that different coping mechanisms may work in different situations (Wood, 2014). Having multiple ways of coping with stressful situations will bolster your self-confidence which will allow you to deal with both old and new challenges (Allen, 2010).

## **National Standards:**

### **Next Generation Science Standards**

- Crosscutting Concepts
  - **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.
    - Change is measured in terms of differences over time and may occur at different rates.
    - Some systems appear stable, but over long periods of time will eventually change.
  - **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.
    - Cause and effect relationships are routinely identified, tested, and used to explain change.
  - **Structures & Functions:** The way an object is shaped or structured determines many of its properties and functions.
    - Substructures have shapes and parts that serve functions.
- Related Grade Level Content
  - **Structure, Function, and Information Processing**
    - 4-LS1-1: Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.
    - 4-LS1-2: Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways.

### **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:A1.5 Identify attitudes and behaviors that lead to successful learning
    - A:A2 Acquire Skills for Improving Learning
    - A:A2.2 Demonstrate how effort and persistence positively affect learning
    - A:A2.3 Use communications skills to know when and how to ask for help when needed
    - A:A2.4 Apply knowledge and learning styles to positively influence school performance

#### **Career Development**

- **Standard A:** Students will acquire the skills to investigate the world of work in relation to knowledge of self and to make informed career decisions.
  - C:A1 Develop Career Awareness
    - C:A1.3. Develop an awareness of personal abilities, skills, interests and motivations

#### **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
    - PS:A1.4 Understand change is a part of growth
    - PS:A1.5 Identify and express feelings
    - PS:A1.10 Identify personal strengths and assets
  - PS:A2 Acquire Interpersonal Skills
    - PS:A2.3 Recognize, accept, respect and appreciate individual differences
- **Standard B:** Students will make decisions, set goals and take necessary action to achieve goals.

- PS:B1 Self-knowledge Application
  - PS:B1.1 Use a decision-making and problem-solving model
  - PS:B1.2 Understand consequences of decisions and choices
  - PS:B1.3 Identify alternative solutions to a problem
  - PS:B1.4 Develop effective coping skills for dealing with problems
  - PS:B1.5 Demonstrate when, where and how to seek help for solving problems and making decisions
- **Standard C:** Students will understand safety and survival skills.
  - PS:C1 Acquire Personal Safety Skills
    - PS:C1.10 Learn techniques for managing stress and conflict
    - PS:C1.11 Learn coping skills for managing life events

### **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.
  - 1.5.1- Describe the relationship between healthy behaviors and personal health. **(CDC)**
  - 1.5.2- Identify examples of emotional, intellectual, physical, and social health. **(CDC)**
- **Standard 4:** Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.
  - 4.5.1-Demonstrate effective verbal and nonverbal communication skills to enhance health. **(CDC)**
  - 4.5.4- Demonstrate how to ask for assistance to enhance personal health. **(CDC)**
- **Standard 5:** Students will demonstrate the ability to use decision-making skills to enhance health.
  - 5.5.1: Identify health-related situations that might require a thoughtful decision. **(CDC)**
  - 5.5.2- Analyze when assistance is needed in making a health-related decision. **(CDC)**
  - 5.5.3: List healthy options to health-related issues or problems. **(CDC)**
  - 5.5.4: Predict the potential outcomes of each option when making a health-related decision. **(CDC)**
  - 5.5.5: Choose a healthy option when making a decision. **(CDC)**
  - 5.5.6: Describe the outcomes of a health-related decision. **(CDC)**
- **Standard 7:** Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.
  - 7.5.1: Identify responsible personal health behaviors. **(CDC)**
  - 7.5.2: Demonstrate a variety of healthy practices and behaviors to maintain or improve personal health. **(CDC)**
  - 7.5.3: Demonstrate a variety of behaviors to avoid or reduce health risks. **(CDC)**

### **References:**

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