



Grade 3: Lesson 1

Brain Stress Response System

Optional Mentor texts: Your Fantastic Elastic Brain – Joann Deak
Matheo et le nuage noir – Manon Jean
Sweetest Kulu – Celina Kalluk

Time: Lesson – 1 period
Extension – 1 period

OVERALL EXPECTATIONS:

A1. apply, to the best of their ability, a range of social-emotional learning skills as they acquire knowledge and skills in connection with the expectations in the Healthy Living strand for this grade.

D1. demonstrate an understanding of factors that contribute to healthy development.

SPECIFIC EXPECTATIONS:

A1.1 apply skills that help them identify and manage emotions as they participate in learning experiences in health and physical education, in order to improve their ability to express their own feelings and understand and respond to the feelings of others.

A1.2 apply skills that help them to recognize sources of stress and to cope with challenges, including help-seeking behaviours, as they participate in learning experiences in health and physical education, in order to support the development of personal resilience.

D 1.6 explain how the brain responds (i.e., the brain's stress response – fight, flight, freeze) when it thinks there is a threat and how that response might affect thoughts, emotions, and actions.

LEARNING GOALS:

We are learning...

- the three basic ways people often react to fear: fight, flight, freeze.
- to determine the differences between fight, flight and freeze using pictures and words.
- how people react when they are feeling scared.



SUCCESS CRITERIA:

Consider using the following questions to co-develop success criteria with your students:
“How will we know we are achieving our learning goals? What will that look like/sound like?”

Sample success criteria to help guide you

- I can tell the difference between the brain’s stress responses (fight, flight, freeze).
- I know my strengths.
- I can determine which brain stress response I most often react to.

MATERIALS & RESOURCES NEEDED:

Lesson

- Whiteboard/Chart paper – somewhere to record answers and for student group work
- Markers/Pencil Crayons

Extension

- “My Brain Makes Me, Me!” activity (provided)
- Markers/Pencil Crayons

CONSIDERATIONS:

- Approaches to all instruction, including Social-Emotional Learning (SEL) skills, must be mediated through respectful conversations about students’ lived realities, inequity, bias, discrimination and harassment.
- A consideration if using the book - “Your Fantastic Elastic Brain”
While learning from mistakes and learning to stretch and grow are of course good things, be aware that a focus on a growth mindset has a risk of putting the onus on the student as an individual to “rise above” system inequities. Acknowledge the need for system change to address inequities and issues such as racism.



Cross Curricular Expectations

NOTE: Language expectations are met when adding the optional extension task. If you are not using, then ignore.

Health & Physical Education	Language
<p style="text-align: center;">Social Emotional Learning Skills – Specific Expectations</p> <p style="text-align: center;">Strand A</p> <p>A1.1 apply skills that help them identify and manage emotions as they participate in learning experiences in health and physical education, in order to improve their ability to express their own feelings and understand and respond to the feelings of others.</p> <p>A1.2 apply skills that help them to recognize sources of stress and to cope with challenges, including help-seeking behaviours, as they participate in learning experiences in health and physical education, in order to support the development of personal resilience.</p>	<p style="text-align: center;">Reading – Specific Expectations</p> <p>1.3 Comprehension Strategies Identify a variety of reading comprehension strategies and use them appropriately before, during, and after reading to understand texts (e.g. activate prior knowledge, ask questions, make and confirm predictions based on evidence from the text, synthesize ideas)</p> <p>1.5 Making Inferences Make inferences about texts using stated and implied ideas from the texts as evidence</p> <p>1.6 Extending Understanding Extend understanding of texts by connecting the ideas in them to their own knowledge, experience and insights, to other familiar texts, and to the world around them</p>
<p style="text-align: center;">Healthy Living – Specific Expectations</p> <p style="text-align: center;">Strand D</p> <p>D1.6 Explain how the brain responds (i.e., the brain’s stress response – fight, flight, freeze) when it thinks there is a threat and how that response might affect thoughts, emotions, and actions.</p>	<p>1.7 Analysing Texts Analysing texts and explain how specific elements in them contribute to meaning</p> <p>1.8 Responding To and Evaluating Texts Express opinions about the ideas and information in texts and cite evidence from the text to support their opinions</p> <p style="text-align: center;">Media Literacy – Specific Expectations</p> <p>3.4 Produce some short media texts for specific purposes and audiences, using a few simple media forms and appropriate conventions and techniques (e.g., a sign or poster for their classroom or the school).</p>



Lesson

Minds On – 10 minutes

Discuss with students how the brain is the most powerful part of your body. It's amazing to think that your brain works as a control center of the entire body.

Brainstorm with students what they already know about the brain and make a list on chart paper or whiteboard.

Ideas:

- it helps you remember things
- used for thinking, feeling emotions, learning
- controls everything, like breathing and heart pumping
- stores memories
- there are different parts to the brain that have special jobs
- the brain is the control center of the whole body
- the brain is the center of our nervous system, allowing us to control movements, thoughts and decisions.

Ask students:

Your brain controls so many things including your feelings. Think of a time when you were worried about something? What did you do and why? Discuss. [SEL 1.1] Feel free to give students an example of when you were worried about something. (Eventually the goal is to use flight, flight, or freeze as a possible response but the language is not needed for the introduction.)

(it's important to know your students and that this may elicit a fight, flight or freeze response from a child if they have experienced trauma. *Have a plan in place for how you will support a student that is feeling overwhelmed*).**

Action Task – 20 minutes

Suggested Teacher prompt: (*Ontario Curriculum, Health and Physical Education, 2019, p147*)

"If our brain senses that we are worried about a threat or danger, it sets off an alarm to alert us by making us feel that something is not okay – it might make our heart beat a little faster, or our stomach might feel upset.

This alarm can be very important in getting us ready to take action. But sometimes, like a real alarm, the 'alarm' in our body can be too sensitive and we experience a 'false alarm' – we get nervous feelings in our body, even when there is nothing really to be afraid of.

This is our brain's way of letting us know that there is something we need to pay attention to. When the alarm goes off, we need to figure out if there is a real threat or not. Then it's easier to know how to respond.



What are some of the things that you think can make this alarm go off in our body? What do you do about it?" [SEL 1.1, 1.2]

*Consider including a wide range of examples of worry - worrying about a new beginning or worrying about systemic racism.

Possible Student Answer:

"When I heard a sound last night, my heart raced and I couldn't get back to sleep. Later I figured out it was just the cat jumping off the bed."

"When I have to share my work in front of the class, I get butterflies in my stomach. It helps me to take a few deep breaths and remember that it's okay to feel a bit nervous and that I'll get through it."

Suggest Teacher Prompt:

Explain to students that when people are worried about something, they respond differently. This depends on their experiences. It's important to understand that being scared is a natural response.

Let students know that there are three basic responses to when we are worried about a threat or danger: fight, flight and freeze. As soon as your brain senses the threat it gets your body ready to react by fight, flight, or freeze. What do you think I mean by fight? What do you think I mean by flight? What do you think I mean by freeze? [SEL 1.1, 1.2]

Activity:

Have students work in small groups or pairs and have them use chart paper to brainstorm each of the responses: fight, flight, freeze. Students can divide their chart paper into the three sections. Have students use pictures and words to list examples of how that response might affect thoughts, emotions, and actions. For example, students can list facial expressions, actions, and what someone might be thinking. [SEL 1.1, 1.2] *Remind students that everyone experiences these feelings in different ways and that there is no "right" way to feel or react.*

Examples:

Fight – fists up, face red, angry look on face, fists clenched

Flight – feeling like you want to run away, don't want to deal with the situation, scared look, want to hide

Freeze – can't move, feet glued to the floor, watching but can't do anything about it, frozen

Consolidate – 10 Minutes

Bring the class back together and have them share their posters with each other.

Discuss the words and pictures they used. Notice if there are any similarities within each category.

Create a master list together for fight, flight and freeze.



Optional Extension Task – 40 minutes

1. **Choose** an optional Mentor Text that will best fit your needs.
2. **Read** text.
3. **Go** over the task with your students. The instructions attached will work for any of the activities.

TASK:

Have students make a poster titled “My Brain Makes Me, Me!”. (Feel free to print on a 11x14 page so students can create their poster or have students complete this on a computer.)

This task could also be completed in a variety of alternate ways. Consider how students might be able to communicate their thinking orally, or digitally. Could they record their answers in a video or audio recording? Could answers be added to a Jamboard, Padlet, or other digital tool?

Overview of the books suggested:

YOUR FANTASTIC ELASTIC BRAIN: STRETCH IT, SHAPE

It is the book you need to teach growth mindset. Did you know you can stretch and grow your own brain? Or that making mistakes is one of the best ways your brain learns? Awarded as one of the best growth mindset books for kids, *Your Fantastic Elastic Brain: Stretch It, Shape It* teaches all the ways that the brain can develop with exercise, just like the rest of our bodies. Educator and psychologist Dr. JoAnn Deak offers a fun and engaging introduction to the anatomy and functions of the brain that will empower each young reader to S-T-R-E-T-C-H and grow their fantastic, elastic brain!

MATHEO ET LE NUAGE NOIR (ADDITIONAL)

Ce livre, joliment illustré, raconte l’histoire de Mathéo, un jeune garçon qui vit beaucoup de colère et qui éprouve de la difficulté à gérer ses émotions. Un matin, alors qu’il se lève du mauvais pied, Mathéo se retrouve avec un énorme nuage noir planant au-dessus de sa tête! Comble de malheur, celui-ci l’accompagne à l’école et, durant toute la journée, ce nuage noir, reflétant les émotions négatives de Mathéo, contamine toutes ses relations avec les autres. Au cours de cette journée, Mathéo apprendra à reconnaître les émotions qui l’habitent et prendra conscience du pouvoir qu’il a de les transformer. Par cette histoire, qui rejoint les enfants, l’auteure souhaite leur démontrer qu’il est tout à fait normal de vivre de telles émotions, mais qu’il existe des stratégies pouvant les aider à se sentir mieux et à être plus heureux.

SWEETEST KULU (ADDITIONAL)

A beautiful poem written by an acclaimed Inuit throat singer describes the gifts given to a newborn baby by all the animals of the Arctic. This book is infused with the traditional Inuit values of love and respect for the land and animals.



Suggested Mentor Texts and Guides

YOUR FANTASTIC ELASTIC BRAIN

This book does not follow a narrative form, teachers may only wish to read part of the story or read over multiple days. This book does deliver the crucial message that mistakes are an essential part of learning and it's important that we grow our brain by learning new things and about ourselves.

Before Reading:

What does the front cover of this book tell you about this book?
What do you predict will happen in this text?

During Reading:

Feel free to pause at any point to discuss what is happening in the story or check for understanding.

After Reading:

Students might explore the author's message around how our brain controls our emotions and since we are in control of our brain, we are also in charge of our emotions.

We can stretch part of our brain that controls our feelings.

Our brains will remember the times we were proud, happy, overcame a challenge, etc.

The more we do these things, the stronger our brains will be able to support our own mental health.

Assign the poster task.

MATHEO ET LE NUAGE NOIR

Before Reading:

What does the front cover of this book tell you about the story?

What do you predict will happen in this story?

During Reading:

Feel free to pause at any point to discuss what is happening in the story or check for understanding.

After Reading:

What is the author's message in this text?

What connections did you make to the story? Or did you make any additional connections to the story?

Why do you think I read this story to you if our topic is focused on healthy living?



SWEETEST KULU

Before Reading:

What does the front cover of this book tell you about the story?

What do you predict will happen in this story?

During Reading:

Feel free to pause at any point to discuss what is happening in the story or check for understanding.

After Reading:

What is the author's message in this text?

What connections did you make to the story? Or did you make any additional connections to the story?

Why do you think I read this story to you if our topic is focused on healthy living?



My Brain Makes ME, ME!

Name: _____

My brain is FANTASTIC!

What are some of my strengths? (Use pictures and words)

My brain is ELASTIC!

What are some parts of your brain that you want to stretch? (Use pictures and words)

Fight, Flight, Freeze!

When I am worried about a threat or danger my brain tells my body to...
(Choose one of the responses that fits you best and use pictures and words)

