

Issue 75

The Helpful and Harmful Lizard Brain

No one is born with thinking skills and BrainWise teaches these complex brain processes using easy-to-learn lessons called the 10 Wise Ways. Each Wise Way introduces a thinking skill that builds a new brain connection to Stop and Think. The lessons help you draw on the right skills at the right time to replace impulsive and emotional reactions with good choices.

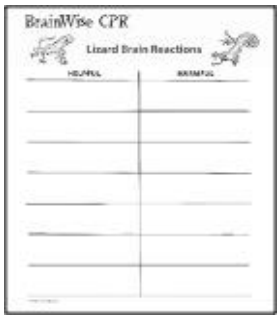
Wise Way #1 – use your Wizard Brain over your Lizard Brain –is the core of the program. It explains how the brain's five senses collect threatening information from your surroundings and rapidly send signals to the center of the brain (relay center or thalamus) where they are processed. They automatically send warnings to the limbic system -- also called the Lizard Brain because its "fight or flight" reaction is found in reptiles.



Many of these reactions are connected with safety and survival – dropping a hot stick, ducking from a falling rock, spitting out toxic food, escaping from the smell of smoke, and finding safety when thunder rumbles. These "helpful" Lizard brain reactions protect you and your body.



However, some Lizard Brain reactions, also triggered by fear and other strong emotions, are not helpful and cause harm. These non-thinking reactions include shouting when upset, hitting someone, ignoring danger signs in a toxic relationship, or dismissing warnings of problems. Lizard Brain behaviors also include being "crazy in love," taking dangerous selfies when excited, and hitting "send" on a explosive email. These are all "harmful" Lizard Brain reactions.



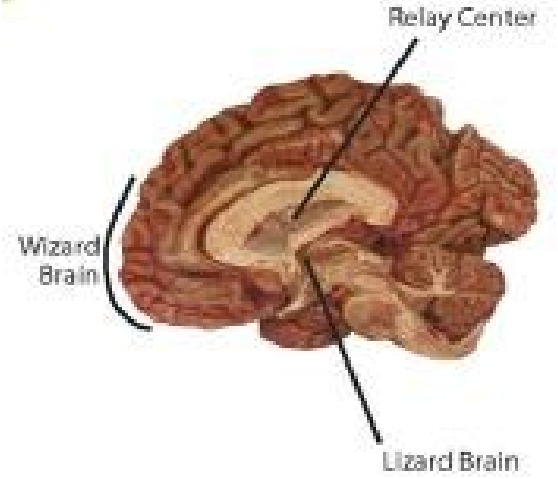
The worksheet helps students distinguish between senses that trigger Helpful Lizard Brain and Harmful Lizard Brain reactions (Click here to link to the worksheet.)

How do you bypass harmful Lizard Brain reactions and Stop and Think before

you react? Not everyone reacts to harmful Lizard Brain triggers and brain research shows us why: **The brain forms connections when it learns new material.** People who bypass Lizard Brain reactions have learned how to Stop and Think.

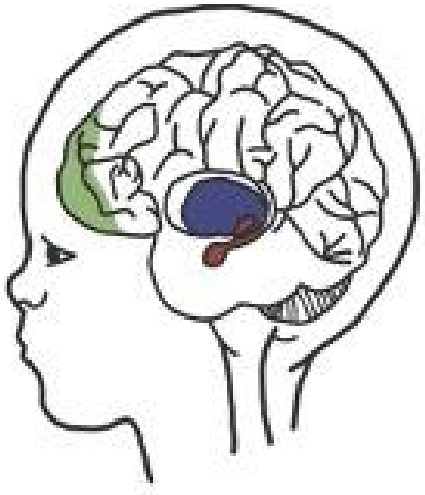
BrainWise simplifies this concept for nonscientists and shows how learning 10 Wise Ways helps build brain connections between the relay center/Lizard Brain and the prefrontal cortex or thinking brain (Wizard Brain) located behind the forehead. When the senses send warning signals to the relay center, the new pathways developed by learning the skills diverts them to the Wizard Brain.

Instead of reacting on impulse and emotion, the Wizard Brain goes to work and rapidly processes information and replaces harmful Lizard Brain reactions with thinking responses. This information helps explain why learning the 10 Wise Ways helps prevent problems. The difference between Lizard Brain reactions and Wizard Brain thinking becomes clear, and answers the question, "What was I thinking?"

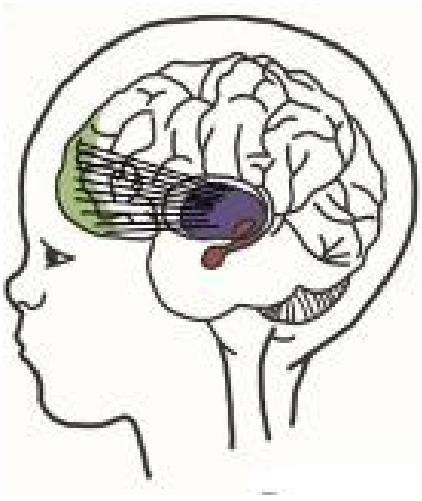


Research shows that practice is needed to retain thinking skills --the Lizard Brain will quickly take over if the connections are not strong. Practice is easy and the BrainWise curriculum has many activities for using the 10 Wise Ways. BrainWise students keep track of their progress with the "Build a Brain Connection" activity following each lesson. After learning a Wise Way, students draw a line between the Wizard Brain and Relay Center on their brain picture that shows they are building a connection.

The brain below shows a child brain with ten connections. Blue is the Relay Center, Red is the Lizard Brain, and Green is the Wizard Brain.



Brain before learning BrainWise



Brain after learning the 10 Wise Ways

At the end of the program, they can identify the skills they have learned to help them Stop and Think:



After learning the first four Wise Ways, a formerly homeless veteran hospitalized for serious mental illness asked, “Why didn’t anyone teach me this before?”

A counselor who works with underserved children and their families saw how they absorbed information about the brain and said “BrainWise gives me tools to teach skills that improves lives.”

An inner city fourth grader held up a picture of the brain and said, “BrainWise makes you feel smart, not dumb.”

A five-year-old analyzed the behavior of the Fox in the story of the *Gingerbread Boy*. He said the Fox used his Wizard Brain to trick the Gingerbread Boy to ride on his back across the river and used his Lizard Brain to eat him.

The 10 Wise Ways explain important concepts that build brain capabilities that have a life-long impact. Knowledge about the five senses and using the Wizard Brain over the Lizard Brain is information that helps people Stop and Think. The 10 Wise Ways are much-needed resource for dealing with the problems and challenges today. Thank you for teaching BrainWise!



Take care,

Dr. Pat

On a Lighter Note

Every hour around the clock about 9,000 people call a Pep Talk hotline with recordings

from elementary school students. The hotline was started by teachers Asherah Weiss and Jessica Martin to help students at Westside Elementary School in California spread joy during these challenging times. The children give pre-recorded pep talks on how to cope with different problems. The following video introduces you to the project.

BrainWise instructors could do a similar project and students of all ages can give advice and also teach the 10 Wise Ways. For example, advice to help with problems might be, "Stop and Think and use your Wizard Brain!" or "Go to your Constellation of Support" or "Pay attention to your Red Flag Warnings!" Watch the short video below and dial 707-998-8410 to listen to the kids' positive messages.

