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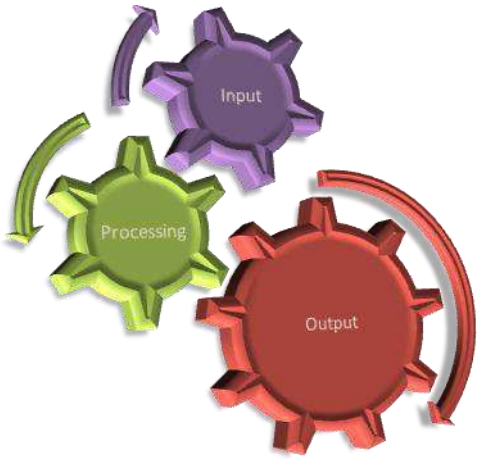
Brains In Gear (BIG)

"BIG Secrets for Successful Thinking and Learning"



"Schooling is not about information. It's getting kids to think about information. It's about understanding knowledge and wisdom." ~D. Meier, Accelerated Learning

For information concerning IMPACT II opportunities, such as interschool visits, staff development, workshops and Adapter and Disseminator grants, please contact:

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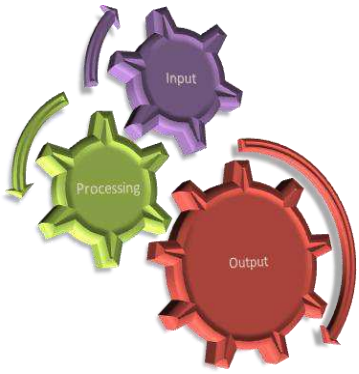


Objectives and Benchmarks

Objective 1: The students will use hands-on activities to learn key brain functions as they relate to thinking processes.
Objective 2: The students will define the term *metacognition*.
Objective 3: The students will define the words *behavior* and *consequences*, as they relate to positive and negative actions in thinking.
Objective 4: The students will apply cognitive strategies of input, incorporating techniques for gathering information such as goal setting, time management, and initiative.
Objective 5: The students will apply cognitive strategies of processing, incorporating techniques for elaborating thought and utilizing information such as summarizing, making meaning, and problem definition.
Objective 6: The students will apply cognitive strategies of output for applying information using techniques such as finishing power, thoughtful expression, and learning from experiences.
Objective 7: The students will increase academically engaged time through the use of cognitive thinking strategies.
Objective 8: The students will improve academic achievement through the use of cognitive thinking strategies.

Common Core State Standards are included throughout this program through the use of read-alouds (fiction and nonfiction), learning vocabulary, and participating in listening, speaking, and writing with each lesson. The following page lists related Reading/Language Arts Benchmarks at the Fourth Grade level, keeping in mind this program is adaptable for all grade levels. Although Science is touched upon through the teaching of Brain Basics, the program's main focus of cognitive skills fits best with Reading/ Language Arts Benchmarks, so the non-fiction standards have been included. Keep in mind that the program can be adjusted for any level, including many more standards across grade levels and curriculum content. A list of Marzan's high-yield strategies for teaching with the greatest results for student achievement, are also included. These brain-based research strategies are utilized throughout the BIG Cognitive Concepts program.

Marzano's High-Yield Strategies That Affect Student Achievement

A. Identifying Similarities and Differences
B. Summarizing and Note Taking
C. Reinforcing Effort and Providing Recognition
D. Homework and Practice
E. Nonlinguistic Representation
F. Cooperative Learning
G. Setting Objectives and Providing Feedback
H. Generating and Testing Hypotheses
I. Cues, Questions, and Advance Organizers

Common Core State Standards for ENGLISH LANGUAGE ART S & Literacy in History/Social Studies, Science, and Technical Subjects
Reading Standards for Informational Text Grade 4

Key Ideas and Details

1. Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
2. Determine the main idea of a text and explain how it is supported by key details; summarize the text.
3. Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.

Craft and Structure

4. Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a *grade 4 topic or subject area*.
5. Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.
6. Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided.

Integration of Knowledge and Ideas

7. Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.
8. Explain how an author uses reasons and evidence to support particular points in a text.
9. Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.

Range of Reading and Level of Text Complexity

10. By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.

Course Overview

BIG (Brains In Gear) is a literature-based curriculum that explicitly teaches cognitive skills needed to boost student achievement and increase academically engaged time. Students who are effective thinkers are sure to have less frustration as well as higher achievement. Using brain-based research techniques, catering to all learning styles, students learn how to efficiently gather, process, and apply information within the brain.

As a precursor to the BIG cognitive concepts, students are introduced to the power of the physical brain, by teaching some *Brain Basics* and defining the term, *metacognition*. Older students may want to conduct further research into the fascinating capabilities of the human brain. Brain Gym exercises can provide a wonderful start to each cognitive skills lesson. The Great Brain Book and Young Genius: Brains can be used for sharing information about the brain to students of various levels. Additionally, learning styles inventories can be administered and discussed with students, giving them insight into their own uniqueness. The *Recommended Resources* page has additional websites to further assist in teaching Brain Basics and Learning Styles.

The core of the program is the 18 BIG lesson plans, divided into three categories: the input gear, the processing gear, and the output gear. The *Input Gear* refers to the gathering of sensory information, which is essential for thinking and learning. The *Processing Gear* refers to processing and elaborating the information the brain has received. The *Output Gear* refers to applying what is learned and utilizing what your brain has input and processed. Each gear provides specific lesson plans for teaching necessary cognitive skills. Each lesson plan is packed with specific ideas for teaching the skill. The Supplemental Materials section includes mini-posters and activities for further guidance. The topics are literature based, but lend themselves to creative adaptations for every grade level and subject. Keep in mind that even older students may enjoy read-aloud activities with picture books, as many universal themes can be found. Teachers can easily create their own vignettes and/or find additional stories in their classroom libraries that incorporate cognitive thinking processes. The lessons can be taught in any order and can be adapted to any time frame. With this program, cognitive skills, previously overlooked as explicitly taught lessons, can easily be incorporated into your current teaching practices.

Brain Basics

Introduce your students to the power of the physical brain, helping them better understand how learning takes place. Adjust your teaching to the age/grade of your students. Even young students enjoy learning the 'big' brain words. See the supplemental materials, *Brilliant Brain Basics* page, for visuals.

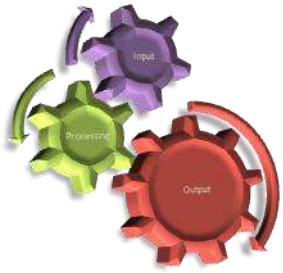
Main Brain Parts: Show students visuals of the brain with four lobes and describe/label the main parts. Students can color their own pictures. Students can create their own brain model with colored clay and label the parts. *Four Lobes*: *Frontal Lobe* (Concerned with reasoning, planning, parts of speech and movement, emotions, and problem-solving. *Parietal Lobe* (Concerned with touch, pressure, temperature and pain) *Temporal Lobe* (Concerned with perception, auditory recognition, and memory). *Occipital Lobe* (Concerned with many aspects of vision) *Cerebellum*: Concerned with coordination of voluntary motor movement *Brain Stem*: Functions located in the brainstem include those necessary for survival (breathing, digestion, heart rate, blood pressure) and for alertness. It is the pathway for all fiber tracts passing from the spinal cord to the brain.
Two Hemispheres:
The left side of the brain is the seat of language and processes in a logical and sequential order. The right side is more visual and processes intuitively, holistically, and randomly. *Printable Brain Hat*: http://www.ellenjmchenry.com/sitebuildercontent/sitebuilderfiles/brainhat.pdf
Neurons: Cells of the nervous system are called neurons. There are approximately 100 billion neurons in the human brain. Young students enjoy seeing and writing this large number. Have young students try to write the number 100,000,000,000 and compare it to the actual number to see if they have the correct number of zeros. Have students try this: Hold out your arm and spread your fingers. Your hand represents the "cell body"; your fingers represent "dendrites" bringing information to the cell body; your arm represents the "axon" taking information away from the cell body. Have students trace their arm on paper and label the parts of the neuron. Students can also use pipe cleaners to represent neurons.

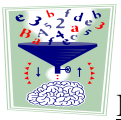
Brain Food: Brain Gelatin Molds can be purchased to add fun and interest to your lessons. Make gelatin molds of the brain to serve to your students. Have one student slice the brain in half using a plastic knife to show the left and right hemispheres. Try different flavors and colors! Make a Brain Mold to celebrate student success anytime during the school year.

Metacognition refers to knowledge of your own thoughts and the factors that influence your thinking. Stated another way, metacognition is "thinking about thinking". It is the process of acquiring, analyzing and applying information appropriately. Cognitive thinking is essential in school and life. See *Start Your Ignition with Metacognition* and the traffic light visual aid (supplemental materials) for assistance. Capable students can keep a *Metacog-Log* (a journal), for writing notes and reflecting on what they are learning about thinking skills.

Behavior/Consequences: Infuse these easy-to-understand definitions throughout your teaching. *Behavior* is everything you say and do. There are positive and negative behaviors. Make a T-chart to discuss and share some random behaviors as examples. A *consequence* is what happens *after* a behavior. There are also positive and negative consequences. Use your T-chart to discuss and share possible consequences for the behaviors listed. Reinforcing these concepts will help your students think metacognitively.

Brains In Gear (BIG)
BIG Cognitive Concepts Checklist
"The Secrets to Successful Thinking and Learning"





INPUT GEAR

___1. Goal Setting
___2. Optimistic Attitude
___3. Taking Initiative
___4. Planning and Sources
___5. Time and Space Awareness
___6. Essential Focus

PROCESSING GEAR

___7. Problem Clarity
___8. Classify and Compare
___9. Connect and Reflect
___10. Flexible Thinking
___11. Cues and Inference
___12. Meaning and Memory
___13. Summing It Up

OUTPUT GEAR

___14. Point Of View (POV)
___15. Mindful Expression
___16. Courageous Learning
___17. Follow-through Power
___18. Learning From Experiences

Lesson Plan Procedure Page

Each of the BIG Lesson Plan pages will follow the format described on this page.

Materials: Related Read-aloud book(s), Be The Brain Activity Cards, foam brain model, art supplies, drawing paper. Some of the suggested books can easily be used to teach more than one cognitive skill. Feel free to find additional books from your own class library that can also be used to teach these concepts. The foam brain model is used as a prop for demonstrations and for students to hold when it is their turn to speak/share.
Additional Materials: These are optional materials, only limited by the imagination. They may include pictures, music, snacks, teacher-made brochures, props, costumes, stickers, awards, etc.

1. Introduce the Skill: Use the definition and examples to introduce and explain the concept to students. These can be written on the board for note-taking or for discussion.
2. Read-Aloud: Discuss and share how book themes relate to the cognitive skill. You are not limited to suggested book choices. Feel free to find various additional books that relate to the skill being taught. Read one or all suggested books, depending on your time schedule and age/grade appropriateness.
3. Practice the Skill: "Be The Brain" (BTB) Activity Cards –on the bottom of each lesson page
   Game Directions: Short vignettes are used for this interactive paired-activity called "Be the Brain" (BTB), in which one student reads aloud a situation card, and his/her partner ("The Brain") explaining how the skill can be used in the situation described (cause/effect). There are no set answers for these open ended questions. The scenarios are meant to facilitate discussion or even debate while students become metacognitive thinkers. Have the student answering the question hold a model of the brain, as a fun prop. Set up a simple routine for each BIG lesson so students will be able to facilitate themselves after a few sessions. Many variations can ensue, such as having additional students called upon to offer suggestions/answers and even role-playing the vignettes. Capable students can also write about the vignettes, as an extension of the activity. The BTB activity cards include home and school scenarios. Feel free to create more vignettes and/or adjust them to relate to your students' age/grade. The activity cards can also be read by the teacher.
4. AAA Extension: "*Ask An Adult*" can be done as homework or as an in-school interview. Ask an adult how they use this skill at home/work/with friends, etc. This will help students make meaning of the skill, as it is used in everyday lives of adults they know and respect.
5. Application: Students make the skill their own by creating a poster for the new cognitive skill, including drawings, and at least one slogan/motto representing their new learning. You may want to provide a teacher-made example for each one. Students who dislike drawing can write about the skill with a book report from the Read-Aloud, or even create their own additional BTB activity cards.
6. Extension: All lessons have extension ideas to further teach and utilize the cognitive strategy.

**The degree of teacher-assistance depends on level/age of students. Adjust accordingly by 'spoon-feeding' little ones, and eliciting responses from older, more capable students.

Input Gear: Goal-setting 

Materials: Suggested Read-aloud book(s): Amber on the Mountain, Annie's Plan, Money Troubles, "Be The Brain" Activity Cards, foam brain model, art supplies, drawing paper
Additional Materials: toy car prop; picture of a bulls-eye target (supplemental materials)
1. Introduce the Skill: Goal Setting is having a clear sense of your intentions or goal in any situation; formulating a plan to reach a desired outcome, or target; predicting your own success; steering your brain in the direction of your goal
2. Read-Aloud: Read-aloud and share/discuss how making a plan for your goal can bring you closer to reaching goals and succeeding. Discuss how this theme relates to the story you read. How did the characters set and reach their goals? Could they have set their goals in a different way? How would you have done it?
3. Practice the Skill: "Be The Brain" Activity Cards –on the bottom of page
4. AAA Extension: How do you use Goal Setting in your work? At home? With family/friends?
5. Application: Use paper and art supplies to make mini-mural poster depicting the cognitive strategy of Goal Setting. Slogan examples: Hit the Bulls-eye, Go for the Goal, Plan to Succeed, Fail to plan=Plan to fail, Reach your Target, Drive through the finish line, etc.
6. Extension: Teacher or student-made bulls-eye target drawn on paper with students' goal written on top. A small arrow cut-out is moved closer to center of target as student reaches his/her goal. Dot stickers can be used to mark levels of goal completion, or a toy car can be moved closer and closer to goal.

BTB Card #1  My best friend is sleeping over next weekend, but my room is too messy for visitors. What can I do to set a goal for this situation?	BTB Card #2  I really want an iPod, but do not have enough money from my allowance. What can I do to set a goal for this situation?
BTB Card #3  I would like to raise my Math grade from a B to an A on my next report card. What can I do to set a goal for this situation?	BTB Card #4  To get a prize at the end of the school day, I must earn at least 5 Positive Behavior Points. What can I do to set a goal for this situation?

Input Gear: Optimistic Attitude 

Materials: Suggested Read-aloud book(s): Amber on the Mountain, The Blue Day Book For Kids, Salt in his Shoes, The Grouchy Ladybug "Be The Brain" Activity Cards, foam brain model, art supplies, drawing paper
Additional Materials: Clear cup, filled halfway with colored liquid as prop; Control the Weather poster (supplemental materials); song: "The Climb" by Miley Cyrus (great lyrics)

1. Introduce the Skill: Thinking optimistically is important for physical and mental health! When you catch your brain thinking negatively, don't be so hard on yourself. *Be good to yourself!* Changing your thinking can change your life for the better! Some see the cup as half-empty, others as half-full (show prop). How do you see it?
2. Read-Aloud: Read related book(s); share and discuss how this book can help you think positive thoughts, even in difficult or frustrating times. Amber: How did Amber's positive attitude help her learn to read and write? Ladybug: Have you ever felt the way the ladybug felt? What could you have done differently?
3. Practice the Skill: "Be The Brain" (BTB) Activity Cards –on the bottom of page
4. AAA Extension: How do you use an Optimistic Attitude in your work? At home? With family/friends?
5. Application: Use paper and art supplies to make mini-mural poster depicting the cognitive strategy of Optimistic Attitudes. Slogan examples: I can do it, My glass is half-full, Look on the bright side, Adopt optimism, etc.
6. Extension: Share "Control the Weather in Your Brain poster" (supplemental materials), Discuss opposing attitudes in stormy weather and sunny weather thinking. Have students create a Sunny Weather Thinking Poster.

BTB Card #1  I am having difficulty understanding my homework. I feel really frustrated. What can I do to show an Optimistic Attitude?	BTB Card #2  I auditioned for the school Chorus Club, I did my best, but I am not sure if I will be chosen. What can I do to show an Optimistic Attitude?
BTB Card #3  My cousins are coming to visit for one week. I will have to share my own room with my little cousin. What can I do to show an Optimistic Attitude?	BTB Card #4  I really want to go to the beach today, but now it is raining and I cannot go. What can I do to show an Optimistic Attitude?

Input Gear: Taking Initiative 

Materials: Suggested Read-aloud book(s): Annie's Plan, Author: A True Story, Amber on the Mountain, "Be The Brain" Activity Cards, foam brain model, art supplies, drawing paper
Additional Materials: toy cars, keys, song: "Let's get it started" by The Black Eyed Peas, sounds of a race car revving up, car/racing theme incentive stickers

1. Introduce the Skill: Taking Initiative means: Ready to take action, Go for it, Do something, Start, Begin with a purpose. Some examples are: Beginning class work/homework without being asked; taking it upon myself to help someone in need; taking out the garbage at home without reminders. Music/sounds can be played during introduction.
2. Read-Aloud: Read related book(s); share and discuss how this book can help you take initiative. How did Annie show initiative? What were the effects of the Author writing down her random thoughts? How did Amber show initiative in learning to read/write? How can *you* take initiative for something you'd like to accomplish?
3. Practice the Skill: "Be The Brain" (BTB) Activity Cards on the bottom of page
4. AAA Extension: How do you Take Initiative in your work? At home? With family/friends?
5. Application: Use paper and art supplies to make mini-mural poster depicting the cognitive strategy of Taking Initiative. Slogan examples: Let's get it started, Start your engine, Go for it, 1-2-3-Go, "Just do it", "Start your ignition with metacognition", Press the start button in your brain, etc.
6. Extension: Begin a "Start Your Engine Club". Students are rewarded with sticker on a teacher-designed race-track or steering wheel incentive chart each time they initiate a task on their own.

BTB CARD #1  I just finished having dinner and notice Mom cleaning the dishes from the table, by herself. What could I do to show initiative?	BTB CARD #2  I notice the new student in our class sitting all alone on the playground during recess. What could I do to show initiative?
BTB CARD #3  At home, I throw away a napkin in the trash. I notice the garbage can is full and smelly. What could I do to show initiative?	BTB CARD #4  After trying three new math problems, I am stuck and do not know if I am doing them correctly. What could I do to show initiative?

Input Gear: Planning and Sources

Materials: Suggested Read-aloud book(s): Annie's Plan; Author: A True Story, My Nasty Backpack, Is Your Mama a Llama?, "Be The Brain" Activity Cards, foam brain model, art supplies, drawing paper
Additional Materials: Metacog-Log for research (supplemental materials); clean and organized backpack as prop; magnifying glasses as prop when "looking for" sources
1. Introduce the Skill: Planning and Sources means exploring information in an organized way and investigating useful sources. Some examples are: Having a homework plan, keeping a calendar, organizing your school materials, keeping your bedroom clean, planning a research study with appropriate resources, asking for help from reliable sources
2. Read-Aloud: Read a suggested story; share and discuss how this book can help you plan well and choose reliable sources. My Nasty Backpack is great for showing non-examples, a clean and organized backpack can be a prop to show organization. Is Your Mama a Llama?:What sources did the llama seek to find her mother? This is a great example of the importance of using more than one source for information.
3. Practice the Skill: "Be The Brain" (BTB) Activity Cards on the bottom of page
4. AAA Extension: How do you use Planning and Sources in your work? At home? With family/friends?
5. Application: Use paper and art supplies to make mini-mural poster depicting the cognitive strategy of Planning and Sources. Slogan examples: Plan for greatness, Fail to plan=plan to fail, Organize your mind=organize your life, Be resourceful, etc.
6. Extension: Have the class write a *plan* for a goal they would like to achieve. Assist them in developing a list of reliable sources and a 3-5 step plan to reach their goal (refer to Goal Setting).

 BTB CARD #1 I would like to have a pirate themed birthday party this year. What could I do to plan this activity? What sources could I use?	 BTB CARD #2 My teacher has assigned a science report on animals of the rainforest. What could I do to plan this activity? What sources could I use?
 BTB CARD #3 For Mother's Day, I would like to make Mom a special breakfast with some of her favorite foods. What could I do to plan this activity? What sources could I use?	 BTB CARD #4 I have so much to do today. I have piano lessons, my sister's dance recital, dinner with my family, and homework. What could I do to plan my day? What sources could I use?

Input Gear: Time and Space Awareness 

Materials: Suggested Read-aloud book(s): My Place in Space, Somewhere Today, "Be The Brain" Activity Cards, foam brain model, art supplies, drawing paper
Additional Materials: 3-6 hula hoops for extension activity; Eric Carle books, such as The Very Hungry Caterpillar and The Grouchy Ladybug teach time concepts, too; a clock and/or various timers and time pieces as props; song: "Time (Clock of the Heart)" by Culture Club
1. Introduce the Skill: Time and Space Awareness means navigating your world attentively and thoughtfully. Time and Space concepts can be taught as separate lessons. Some examples of Space: north, south, east, west, personal space, using space on paper (a space between each word, margins), Some examples of Time: when is it appropriate to rush/slow down, other time concepts: early, late, prompt; morning, afternoon, night; using a clock, calendar
2. Read-Aloud: Read a suggested story; Somewhere Today: Discuss time AND space with this interesting book. What other events could be happening in different parts of the world (space concepts) at this very moment (time concept)?
3. Practice the Skill: "Be The Brain" (BTB) Activity Cards on the bottom of page
4. AAA Extension: How do you use Time and Space Awareness in your work? At home? With family/friends?
5. Application: Use paper and art supplies to make mini-mural poster depicting the cognitive strategy of Time and Space Awareness. Slogan examples: Save the Date, Don't Be Late; Take your time, Stop to smell the roses, My place in space is_____, Be a wise owl-use time wisely, Everyone has their own place in space, etc.
6. Extension: Hula-Hoop Dance: Have 3-6 students stand in one hula-hoop and try to dance to music. Discuss space issues. Next, have one student stand in each hula-hoop and dance again. Discuss how much easier it is to dance now.
**Additional activities and suggestions for time and space concepts are available upon request.

BTB CARD #1  I spent so much time getting dressed and choosing the perfect outfit, I was late for my best friend's birthday party. What could I have done to better use my time?	BTB CARD #2  I was standing against the wall near the computer lab when a door opened and hit me in the shoulder. What could I have done to use my space well?
BTB CARD #3  I forgot that my Florida report was due today. Now I will get a lower grade when I turn it in late. What could I have done to better use my time?	BTB CARD #4  My teacher asked me to rewrite my assignment. She could not read my sloppy handwriting. What could I have done to use my writing space well?

Input Gear: Essential Focus 

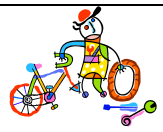
Necessary Materials: Suggested Read-aloud book(s): Annie's Plan; Michael's Golden Rules, Fables: "The Hen and the Apple Tree", "Be The Brain" Activity Cards, foam brain model, art supplies, drawing paper
Additional Materials: Distractions Poster (supplemental materials) to discuss what can keep us from focusing effectively; magnifying glasses or binoculars as props for focusing

1. Introduce the Skill: Essential Focus means engaging in behaviors that lead to understanding (visual/auditory)
Some examples are: Paying attention to important details, selective attention, keeping distractions to a minimum
2. Read-Aloud: Read a suggested story; Annie-What helps Annie get focused? Michael's Golden Rules- Discuss how it is not whether you win or lose, but how you play the game that matters (focus on what's important). Make up your own Golden Rules about Essential Focus. Fables: The Hen and the Apple Tree- How did focus help the hen?
3. Practice the Skill: "Be The Brain" (BTB) Activity Cards on the bottom of page
4. AAA Extension: How do you use Essential Focus in your work? At home? With family/friends?
5. Application: Use paper and art supplies to make mini-mural poster depicting the cognitive strategy of Essential Focus. Slogan examples: Be an Eagle Eye: Focus, Listen and Learn, Focus Pocus, Fine-tune your focus
6. Extension: Take students outside (preferably a nature-rich area with water and trees). Have them sit still for five-to-ten minutes with eyes closed, focusing in individual sounds in the environment. After five minutes, discuss what the sounds were and how they used Essential Focus to appreciate the sounds of nature or even the sounds of construction machines.

BTB Card #1  My friend in class is whispering to me about his new video game while the teacher is discussing our math homework. What can I do to use Essential Focus?	BTB Card #2  I am trying to talk to my best friend on the phone, but didn't hear her question because the sound of a lawn mower outside is bothering me. What can I do to use Essential Focus?
BTB Card #3  I am running late for class, so I do not have time to eat breakfast. Gosh, I am really hungry. I do not know how I will be able to concentrate at school today. What can I do to use Essential Focus?	BTB Card #4  I know I have to get my homework done, but I keep thinking about going for a bike ride because the weather is so nice outside my window. What can I do to use Essential Focus?

Processing Gear: Problem Clarity 

Necessary Materials: Suggested Read-aloud book(s): Money Troubles, Treasure Hunt, The Meanest Thing to Say, Amber on the Mountain, It's Not Fair, Leo the Late Bloomer; Annie's Plan, Corey Stories, Salt in your Shoes, "Be The Brain" Activity Cards, foam brain model, art supplies, drawing paper
Additional Materials: foam question mark prop (purchased or hand-made) – can be used with extension activity, toss to students who are finding the problem.
1. Introduce the Skill: Problem Clarity means identifying your problem in an effort to finding reasonable solutions.
Some examples are: Asking yourself WH questions that can lead to understanding the situation (What is the problem? How do I know it is a problem?).
2. Read-Aloud: Read a suggested story(s); *Note: most stories have a problem/solution format, so feel free to use one of your own favorites. Discuss a character's main problem in the story and the importance of knowing what a problem *is,* in order to find solutions.
3. Process the Skill: "Be The Brain" (BTB) Activity Cards on the bottom of page
4. AAA Extension: How do you use Problem Clarity in your work? At home? With family/friends?
5. Application: Use paper and art supplies to make mini-mural poster depicting the cognitive strategy of Problem Clarity. Slogan examples: I can tackle any problem, What's the Problem?, Problems are no problem for me
6. Extension: Make a Problem and Solution T-chart with *either* the Problem side or the Solution side filled-in. Have students work together to fill-in the missing information, identifying the problem or the solution. Sample problems: The car won't start, my homework is too difficult, I spilled my cereal bowl on the floor Sample solutions: Choose a different game, order a pizza, call a friend for help

 BTB Card #1 I am trying to do my homework, but I cannot find my homework planner. What *could* be my problem in this situation?	 BTB Card #2 I am always hungry at 10:00 in the morning, but it is not yet lunch time. What *could* be my problem in this situation?
 BTB Card #3 I have to use colored pencils to fill-in the parts of a flower on my assignment. I do not remember where I left my colored pencils. What *could* be my problem in this situation?	 BTB Card #4 I am trying to ride my bike, but the chain is making a noise. What *could* be my problem in this situation?

Processing Gear: Classify and Compare

Necessary Materials: Suggested Read-aloud book(s): Communication, Author: A true story, Cory Stories; "Be The Brain" Activity Cards, foam brain model, art supplies, drawing paper
Additional Materials: Have students sort 'real' items, such as M&Ms by color, other foods by size/shape, buttons, coins. Students can also sort books in a bookshelf to practice classifying information. They are many book titles in your class library that can reinforce the comparison/contrast theme.
1. Introduce the Skill: Classify and Compare means to analytically group and organize information. Our brains are on a constant search for meaning, and comparing things in our world helps us to make meaning of them. Also, when we see something new, we can compare it to something we've seen before and make connections in our brain! That's called LEARNING!
Examples: sorting, grouping, alike/different, Venn Diagrams, T-charts and other graphic organizers
2. Read-Aloud: Read a suggested story(s); Communication: compare/contrast modes of communicating. Author: Discuss how the author lists (classifies) her thoughts, and possibly organizes the information later in an organized way for her book writing. Cory Stories: Compare yourself to Cory, use a Venn Diagram or T-chart to identify likenesses and differences.
3. Process the Skill: "Be The Brain" (BTB) Activity Cards on the bottom of page
4. AAA Extension: How do you use Classifying and Comparing in your work? At home? With family/friends?
5. Application: Use paper and art supplies to make mini-mural poster depicting the cognitive strategy of Classify and Compare. Slogan examples: Sort it out, See how things go together, Order up, Orderly is Organized, The more things change, the more they stay the same (comparisons), etc.
6. Extension: The human brain loves to sort things! We can classify and compare information in so many ways: Types of books, animals, color-coding, facts/opinions, alphabetical order, and numerical order just to name a few! Classify the types of foods you need to buy at the grocery store!

Make a shopping list according to categories such as:

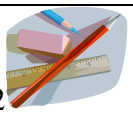
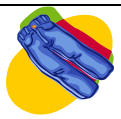
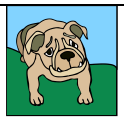
Fruit	Grains	Protein	Vegetables	Snacks

Be The Brain Activity Cards

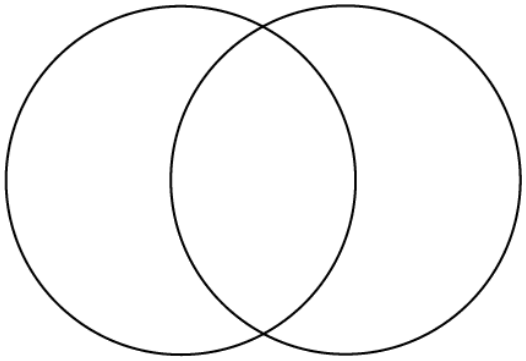
(on the following page)

Processing Gear: Classify and Compare (continued)

Be The Brain Activity Cards

BTB Card #1  I have to write a report on the differences between North and South America. How can I use Classifying and Comparing to plan this report?	BTB Card #2  I have to buy school supplies for the new school year. I need paper, pens, pencils, scissors, glue, notebooks, and many other school supplies. How can I use Classifying and Comparing to do this?
BTB Card #3  My sister would like to wear a different type of outfit for each day this week. She has shorts, skirts, jeans, dresses, tank tops, and t-shirts. How can she use Classifying and Comparing to plan her wardrobe for the week?	BTB Card #4  Our family is getting a new puppy. We cannot decide between these breeds: poodle, Labrador retriever, and bulldog. How can we use Classifying and Comparing to help us decide on the perfect pet?

Sample Venn Diagram:



Make your Own T-chart and other graphic organizers:

http://www.worksheetworks.com/miscellanea/graphic-organizers/tchart.html

Processing Gear: Connect and Reflect 

Materials: Suggested Read-aloud book(s): Communication, Cory Stories, Salt in his Shoes, Leo the Late Bloomer, Crow Boy, Amber on the Mountain, Choose Your Bully, and any character stories you and your students enjoy will work for making connections. ; "Be The Brain" Activity Cards, foam brain model, art supplies, drawing paper Additional Materials: a picture of a bridge can be a visual for connecting new information to what you already know.

1. Introduce the Skill: Connect and Reflect means to make associations or deepen relationships in order to facilitate understanding and meaning; connecting new information to what one already knows. Some examples are: relationships with friends, family; comparing yourself to a book character, or movie/television character; connect with a specific memory, place, or time
2. Read-Aloud: Read a suggested story. Connect and reflect by discussing or writing about text connections. Text-to-Text: Connect the story to another story you have read Text-to-World: Connect the story to something you know about in the world Text-to-Self: Connect the story to something that has happened to you
3. Process the Skill: "Be The Brain" (BTB) Activity Cards on the bottom of page
4. AAA Extension: How do you use Connecting and Reflecting in your work? At home? With family/friends?
5. Application: Use paper and art supplies to make mini-mural poster depicting the cognitive strategy of Connect and Reflect. Slogan examples: Connect the Dots, Connect and Reflect, Connect with Books, Connect with Nature, Connect with Family/Friends, Bridge your thinking
6. Extension: Play the Chain Link Game-One person stands up and starts talking about himself (like an autobiography). Another person joins them, linking arms, when he hears a connection to something the first person has said. For example, they are both from the same state. The new person continues to talk about himself, and play continues as another person links the previous player's arm when she hears something with which she can connect, until everyone has joined in making a Chain Link. In this way, everyone makes a personal connection.

BTB Card #1  There is a new student in our class. Maybe we can be friends. How can I use Connection Skills to get to know him?	BTB Card #2  I am reading a book about a famous professional football player. I love football. I wish I could be that good at the game. How can I use Connect and Reflect skills to improve my game?
BTB Card #3  Juan is going to tell our class about his trip to Puerto Rico. I have never been there, but I have been to Guatemala. How can I use Connect and Reflect skills to relate to Juan's description of his trip?	BTB Card #4  Melanie's Aunt Linda is helping her learn Spanish. Melanie can hear how some of the words in Spanish sound like English words she knows. How can Melanie Make Connections with the language she is hearing?

Processing Gear: Flexible Thinking 

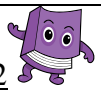
Materials: Suggested Read-aloud book(s): Money Troubles, Cory Stories, Annie's Plan, It's Not Fair, I Feel Worried; "Be The Brain" Activity Cards, foam brain model, art supplies, drawing paper Additional Materials: Sponge or rubber squeeze ball (preferably brain shaped), medium sized smooth rock (see Extension activity)

1. Introduce the Skill: Flexible Thinking means: Do you usually stick with the same way of doing things or the same way of thinking? Sometimes we need to change our thinking to make the best of a situation. This might mean trying different strategies to solve a problem if the 'same old way' isn't working. This can be helpful when taking a test in school, or when doing something at home. Using flexible thinking can even reduce frustration!
Some examples are: making positive choices, seeing more than one solution to a problem, trying various strategies to see what works best for you, being open-minded
2. Read-Aloud: Read a suggested story. How did the characters use Flexible Thinking to solve problems? Could they have been more flexible? In what way? How can you use Flexible Thinking when you are worried or when you feel something is unfair? Money Troubles: The main character learns compassion and empathy through his unselfish acts (flexible thinking).
3. Process the Skill: "Be The Brain" (BTB) Activity Cards on the bottom of page
4. AAA Extension: How do you use Flexible Thinking in your work? At home? With family/friends?
5. Application: Use paper and art supplies to make mini-mural poster depicting the cognitive strategy of Flexible Thinking. Slogan examples: Stretch your brain: Use flexible thinking, Avoid stubbornness- Think flexibly, I'm a flex-y thinker, etc.
6. Extension: Flexible Thinking vs. Rock Thinking: Follow the directions on this website for this activity: http://www.autisminspiration.com/public/169.cfm

BTB Card #1  For our family vacation, my father wants to go to Sea World, and my brother wants to go to Universal Studios, but I want to go to Busch Gardens. How can we use Flexible Thinking to agree on a vacation place?	BTB Card #2  I have always done the same chores at home. Now, my mother has asked me to add two new chores to my list: taking out the garbage and walking the dog. She will pay me an extra $2.00 a week. I do not like smelly garbage and it is hot outside when I walk the dog. What can I do to show Flexible Thinking?
BTB Card #3  I asked my mom for an after school snack. I really wanted potato chips but she gave me a plate of apple slices and honey for dipping. I was disappointed at frist, but once I bit into a juicy apple slice, I really enjoyed it. How am I using Flexible Thinking?	BTB Card #4  My teacher asked us to choose a non-fiction book for our book reports. I really prefer reading fiction, adventure stories. She told me I might like to read about the adventures of real mountain climbers. What can I do to show Flexible Thinking?

Processing Gear: Cues and Inference 

Materials: Suggested Read-aloud book(s): Communication, Fables, Crow Boy, The Hundred Dresses, The Meanest Thing to Say; "Be The Brain" Activity Cards, foam brain model, art supplies, drawing paper
Additional Materials: Magnifying glasses for detecting cues and inferences
1. Introduce the Skill: Cues and Inference means using background knowledge to figure things out for yourself; to draw conclusions, make predictions. Some examples are: Looking for hints, clues, key words, generate hypotheses, be a detective; understanding social cues and norms
2. Read-Aloud: Read a suggested story. What can you infer from the character's behavior? Body language? Tone of voice? What clues lead you to predict what will happen next? What social cues are depicted in the story? Fables: Before reading the moral, can you infer the moral of the story? Communication: Discuss verbal/nonverbal cues
3. Process the Skill: "Be The Brain" (BTB) Activity Cards on the bottom of page
4. AAA Extension: How do you use Cues and Inference in your work? At home? With family/friends?
5. Application: Use paper and art supplies to make mini-mural poster depicting the cognitive strategy of Cues and Inference. Slogan examples: Catch a cue, Infer to understand
6. Extension: Be a Reading Detective: Use magnifying glasses as props when answering questions for a story. Be a Math Detective: Use magnifying glasses to see the operations signs in an equation. They are cues for solving the problem. The 'key words' in a word problem are cues for solving it. Can you find them?

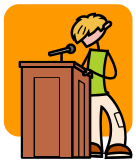
BTB Card #1  As I was telling my sister all about my day on a fishing boat, I noticed she looked bored with her head in her hands. She even yawned! What can I learn about Cues? What can I Infer about her behavior?	BTB Card #2  At the library, I use book covers to help me decide what would be interesting to read. The picture cues help me infer what the story is about. This is a quick way to decide which book to choose. How do you use Cues and Inference with books and stories?
BTB Card #3  My teacher said she would reward each student with a new pencil if we wrote our paragraphs legibly, with correct spacing. She asked us to take our time making our papers neat. She must think handwriting is important. What did I learn about Cues and Inference?	BTB Card #4  When I walked into the classroom, my best friend had his arms crossed and he was looking down. I immediately knew something was wrong and he was not happy. Demonstrate other body language cues. What can you infer from the way people use gestures and facial expressions?

Processing Gear: Meaning and Memory 

Materials: Suggested Read-aloud book(s): Fables; Cam Jansen mystery books, Content-area text books. "Be The Brain" Activity Cards, foam brain model, art supplies, drawing paper Additional Materials: Making Memories At Home and Rainbow Recall (supplemental materials)

1. Introduce the Skill: Meaning and Memory means: choosing appropriate strategies to retain important and meaningful information.
Some examples are: Graphic organizers, mnemonics, songs/lyrics, rhymes, association, etc.
2. Read-Aloud: Read a suggested story. Fables: Choose your favorite fable, how can you remember the meaningful lesson from the story? Discuss strategies that can help you remember the important lesson you learned. Have older students devise their own memory strategies for the fables or content-area material. Younger students can practice memorizing their phone numbers, or how to spell color words. Cam Jansen books: What memory strategy is used in the mystery? What strategy would you use to solve the mystery?
3. Process the Skill: "Be The Brain" (BTB) Activity Cards on the bottom of page
4. AAA Extension: How do you use Meaning and Memory in your work? At home? With family/friends?
5. Application: Use paper and art supplies to make mini-mural poster depicting the cognitive strategy of Meaning and Memory. Slogan examples: Make it Meaningful, An elephant never forgets, Meaningful Minds, Don't forget to remember, etc.
6. Extension: Rainbow Recall Memory Strategy activity (supplemental materials). Use this strategy to remember up to seven items (ie. spelling/vocabulary words, history facts, math formulas, etc.) You can also make a mini-mural to remember seven of your favorite BIG slogans using Rainbow Recall.

BTB Card #1  I met three new friends at today's Campfire Friends meeting. I am trying to remember their names: Joseph, Benjamin, and Jennifer. What memory strategy can I use to help me remember these names?	BTB Card #2  I have eight new spelling words to study this week. All of the words begin with the letters *sl*. The first word is *sleeping*. What spelling strategy do you think will help me learn how to spell my new words?
BTB Card #3  My class is going on a field trip to the zoo in two weeks. I cannot wait! I love animals and want to learn more about them. How can I make this field trip meaningful and memorable?	BTB Card #4  Juan and Carlos have a math test tomorrow. They have decided to study for the test together. Having a study partner can be very helpful. What study strategies do you think will help the boys prepare for their math test?



Processing Gear: Summing It Up

Materials: Suggested Read-aloud book(s): Content-area books, your favorite picture book, "Be The Brain" Activity Cards, foam brain model, art supplies, drawing paper

1. Introduce the Skill: Summing It Up means: using the least amount of words to get your main point across; Summarizing saves you time, helps your brain remember important points and can help you become a better communicator! Our brains have an easier time remembering and understanding things when they represent a big idea (main idea). If the brain is overloaded with a lot of unrelated information, we will not remember it. If someone talks on-and-on about a subject, but never really reaches a main point in the conversation, it is difficult to process their information.
2. Read-Aloud: Read a content-area chapter or your favorite picture book. Fill-in the *Summary Sentence Strategy* as a group, to demonstrate effective summaries.
3. Process the Skill: "Be The Brain" (BTB) Activity Cards on the bottom of page
4. AAA Extension: How do you use Summarizing in your work? At home? With family/friends?
5. Application: Use paper and art supplies to make mini-mural poster depicting the cognitive strategy of Meaning and Memory. Slogan examples: Sum It Up, Summaries are simple, Say it with a Summary, Name it-Verb it-Think it Through
6. Extension: Share these *Secret Summary Strategies* (SSS) with your students:

Here are some SSS tips:
~Highlight important details in a story with a colored highlighter/highlighter tape
~Write margin notes while reading: Three main words for every page/paragraph
~Draw/Write notes while the teacher reads to you
~Close your eyes and make a Mind Movie of the Main Points
~Verbs are the KEY! List the main action words of what is happening
~Practice writing a SUMMARY SENTENCE using as few words as possible… this is fun and challenging!

Name It (Give the title) Example: The movie, Charlotte's Web,	**Verb It (pick one verb that best describes your story)** Examples: tells, describes, explains, expresses, challenges, gives, uncovers, details, etc.	**Think it Through** Example: the caring relationship between a farm-raised pig and an intelligent spider. **Remember to use few words here!*

*Happy Teachers Note: With this strategy, you'll never have to hear the words, "The story is about…." again!

Be The Brain Activity Cards

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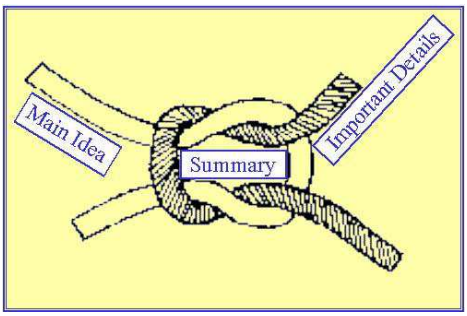
Processing Gear: Summing It Up (continued)



Be The Brain Activity Cards

BTB Card #1  Use Summing It Up to review a movie you have recently seen.	BTB Card #2  Use Summing It Up to tell about your best summer vacation.
BTB Card #3  Use Summing It Up to describe the most delicious meal you have ever had.	BTB Card #4  Use Summing It Up to explain your routine on a typical school day.

** Capable students can *write* their summaries using the SSS tips for this cognitive skill.

Output Gear: Point of View (P.O.V.)

Materials: Suggested Read-aloud book(s): Communication, Somewhere Today, Two Bad Ants, The Hundred Dresses,You Read to Me, I'll Read to You; "Be The Brain" Activity Cards, foam brain model, art supplies, drawing paper
Additional Materials: Two hula-hoops for extension activity; Lesson plan for Two Bad Ants: http://www.readwritethink.org/lessons/lesson_view.asp?id=789

1. Introduce the Skill: P.O.V. means having empathy and respect for the way other's see things. There is rarely only one correct way to view the world. In literature, as in life, there are characters that learn to accept that different viewpoints exist. Books can change a reader's perspective and extend their knowledge through new ways of seeing familiar things.
Some examples are: Being open-minded, putting yourself in someone else's shoes, role-playing, writing a character diary, ask yourself what it would be like to be so-and-so for a day.
2. Read-Aloud: Read a suggested story. Somewhere Today: What would you be doing right now if you were a bald eagle, etc.? What could be the benefits/challenges of being one of the animals in the book. Two Bad Ants:(follow lesson plan above); Communication: Discuss POV using the different vignettes Hundred Dresses: put yourself in the shoes of Wanda and discuss how she felt
You Read To Me: Try reading together using fun voices and experimenting with tone, fluency
3. Process the Skill: "Be The Brain" (BTB) Activity Cards on the bottom of page
4. AAA Extension: How do you use Point of View (P.O.V.) in your work? At home? With family/friends?
5. Application: Use paper and art supplies to make a mini-mural poster depicting the cognitive strategy of Point of View (P.O.V.). Slogan examples: There is more than one way to see things; I'm a P.O.V. Pal; I respect others' P.O.V.; I can walk in your shoes, etc.
6. Extension: P.O.V. Compliment Hoops: Two students- each standing in a hula hoop on the floor; each takes a turn giving a compliment to the other, based on how the other person sees the world. Example: I like the way Jason always takes turns at recess. Do not allow students to use general words such as nice or good. Sharing a specific compliment can help students see how their partner navigates the world. Students can also trade shoes, if permissible, for this activity.

Be The Brain Activity Cards

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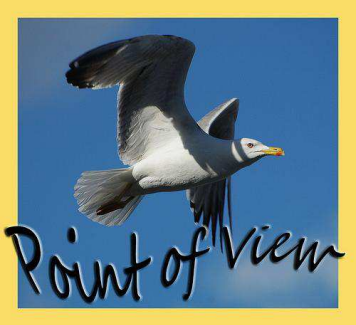
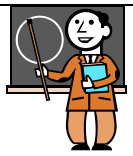
Output Gear: Point of View (P.O.V.) (continued)



Be The Brain Activity Cards

BTB Card #1  Christopher did not understand why his sister, Katie, was afraid of the dark. How can he use P.O.V. to help him understand his sister's fear?	BTB Card #2  Choose a character from one of your favorite books. Tell how it would feel to be that character for one day and live life through their point of view.
BTB Card #3  Your teacher spends a large amount of time planning lessons and works hard each day to help you learn all you can. How can you use P.O.V. to understand and respect what your teacher does for his/her students each day?	BTB Card #4  Your parents set rules and boundaries for you in order to keep you safe. For example, you may have a rule at home to shut off the television and go to sleep at 9:00. How can you use P.O.V. to better understand why your parents set rules and boundaries for you?

Output Gear: Mindful Expression 

Materials: Suggested Read-aloud book(s): The Meanest Thing to Say; Communication, The Hundred Dresses "Be The Brain" Activity Cards, foam brain model, art supplies, drawing paper
Additional Materials: traffic light picture as prop (supplemental materials)
1. Introduce the Skill: Mindful Expression is the ability to express yourself and communicate appropriately and with control, after thoughtful planning.
Some examples are: Thinking before you speak, process information before responding, using wait time, reducing impulsiveness, rehearse your response in your head before verbalizing, consider consequences before verbalizing, waiting your turn, thinking things through
2. Read-Aloud: Read a suggested story. Communication: Discuss effective communication techniques and how we use them in our daily lives; The Meanest Thing and/or Hundred Dresses: Did any of the characters use Mindful Expression? If so, how? How could they have used this skill to spare others' feelings?
3. Process the Skill: "Be The Brain" (BTB) Activity Cards on the bottom of page
4. AAA Extension: How do you use Mindful Expression in your work? At home? With family/friends?
5. Application: Use paper and art supplies to make mini-mural poster depicting the cognitive strategy of Mindful Expression. Slogan examples: STOP, THINK, SPEAK; Brains in Control, I think before I speak, Think it Through
6. Extension: Use the traffic light picture to explain how to stop, think, and respond. Have students draw a traffic light, label the colors with words such as STOP, THINK, SPEAK. Use with writing activities, too: STOP, THINK, WRITE! Discuss how this visual might help in various situations, such as the ones in the Be The Brain activity.

BTB Card #1  Jonathan thought he knew the answer to his teacher's question so, he blurted out the first thing he thought of, but his answer was incorrect. How could he have used Mindful Expression to answer the question appropriately?	BTB Card #2  The class was asked to write one page about their favorite after school activity. They will have 45 minutes to write. How could the students use Mindful Expression to produce a well-organized paper?
BTB Card #3  Dave laughed at his brother, Tony's, attempt to use a skateboard. Tony decided to give up and go inside since he was being laughed at by his brother. How could Dave have used Mindful Expression to be nicer to his brother?	BTB Card #4  Lewis is not comfortable talking on the telephone. He spoke to his grandma so quickly that he forgot to thank her for the gift card she sent him for his birthday. How could Lewis use Mindful Expression to communicate more effectively on the phone?

Output Gear: Courageous Learning

Materials: Suggested Read-aloud book(s): Crow Boy, The Hundred Dresses, Amber on the Mountain, Leo the Late Bloomer; Salt in His Shoes; Michael's Golden Rules
"Be The Brain" Activity Cards, foam brain model, art supplies, drawing paper
Additional Materials: index cards or paper, pencils for extension activity

1. Introduce the Skill: Courageous Learning means working toward your goals, even though they may seem difficult or challenging; attempting new educational experiences; taking appropriate risks to reach your goals
Some examples are: Trying something new, risking and overcoming fear of failure, using nervous energy in a positive way, the feeling of success when you have tried something new and challenging
2. Read-Aloud: Read a suggested story. How did the characters use Courageous Learning? Have you ever used Courageous Learning? Michael's Golden Rules: Create a class list of 10 Golden Rules for Courageous Learning
3. Process the Skill: "Be The Brain" Activity Cards on the bottom of page
4. AAA Extension: How do you use Courageous Learning in your work? At home? With family/friends?
5. Application: Use paper and art supplies to make mini-mural poster depicting the cognitive strategy of Courageous Learning. Slogan examples: Count on Courage, Be Brave, I Can-I Will-I Did, Courage=Success, I am a Courageous Learner; I can learn anything
6. Extension: Have students interview one another in groups of two, using these questions written on the board: *Have you ever been afraid to try something you thought was difficult or challenging? If so, what? What would you need some courage to do right now in your life?* Have students write their partner's responses on paper/index cards. Share in large or small groups for discussion. Discuss how common it is to feel nervous/scared to do things, and how Courageous Learning is an important step in overcoming fear of failure.

Be The Brain Activity Cards

(continued on the next page)

Output Gear: Courageous Learning (continued)

Be The Brain Activity Cards

 BTB Card #1 Bryan was trying to overcome his fear of reading out loud in class. He knew he wasn't the best reader, but wanted to participate. How can Bryan use Courageous Learning to overcome his fear of reading aloud in class?	 BTB Card #2 Tonya's teacher asked her to come up to the board to try a math equation. Tonya was afraid to get the wrong answer. How can Tonya use Courageous Learning to overcome her fear of failure?
 BTB Card #3 Ricardo felt nervous for his first baseball game since joining the team. Before the game, his stomach ached and he felt ill. He knew it was just nerves. How can Ricardo use Courageous Learning to overcome his nervousness during his first game?	 BTB Card #4 Susan wants to call her new friend, Lauren, on the phone, but she is not comfortable talking on the phone with people, especially if she doesn't know them very well. How can she use Courageous Learning to help her overcome her anxiety of talking on the phone?

Output Gear: Follow-through Power

Materials: Suggested Read-aloud book(s): Is Your Mama a Llama?, Annie's Plan, Author: A true story, Cam Jensen books, "Be The Brain" Activity Cards, foam brain model, art supplies, drawing paper
Additional Materials: Bulls-eye Target can be used as visual for task completion (supplemental materials); awards issued to students who complete a task

1. Introduce the Skill: Follow-through Power means: Behavior that results in completing tasks Some examples are: Finishing what you start; Completing tasks in spite of distractions, Celebrate each task completion
2. Read-Aloud: Read a suggested story. Discuss how planning to reach a desired outcome can assist with Follow-through Power. How does the little Llama use follow-through? How does Annie plan to succeed in school to complete the tasks required of her? How does the Author plan and prepare to complete a story? How does Cam use Follow-Through Power to complete/solve mystery cases? Discuss how you can use this skill at school and home.
3. Process the Skill: "Be The Brain" (BTB) Activity Cards on the bottom of page
4. AAA Extension: How do you use Follow-through Power in your work? At home? With family/friends?
5. Application: Use paper and art supplies to make mini-mural poster depicting the cognitive strategy of Follow-through Power. Slogan examples: Finish what you start, Start what you intend to finish, I have Follow-through Power, Do whatcha gotta do, then do whatcha wanna do.
6. Extension: Explain and discuss how seeing the end result before you can help you plan and prepare for getting to that point. Discuss various plans for completion. Try this:

Follow-Through Power Plan

1. Ask yourself, "Why is it important for me to complete this task?"
2. Set aside time to complete the task (homework, project, cleaning up etc.)
3. To stay motivated, Visualize Completion! Close your eyes and *see* the completed task in front of you.
4. Draw a target and put a dot on each line as you move closer to finishing.
5. CELEBRATE SUCCESS when you finish a task! Reward yourself! YIPPEE! I DID IT! ☺

Be The Brain Activity Cards

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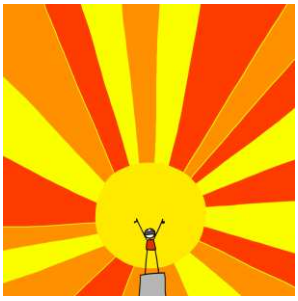
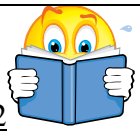
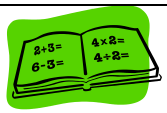
Output Gear: Follow-through Power (continued)

I DID IT!



Celebrate Success!

Be The Brain Activity Cards

BTB Card #1  Liz wants to do well on her next track race, but she has to get up early each morning to train and practice. She wants to improve her sprinting time, but does not like waking up for practice. How can she use Follow Through Power to complete her training?	BTB Card #2  I am enjoying this chapter book, but it is taking so long to reach the end. I don't think I have the patience to read it all. How can I use Follow Through Power to enjoy the reading process?
BTB Card #3  Our teacher said that each student who finishes page 32 in our math book can earn 15 minutes of computer time today. I love computers, but I am having trouble concentrating on math. How can I use Follow Through Power to earn my computer time?	BTB Card #4  Brandon wants to go outside to play with friends, but needs to finish his homework first. He took out his math book and pencils and read the directions. He hears his friends playing ball outside. How can Brandon use Follow Through Power to complete his homework?

**Use award certificates to celebrate completion of tasks!

Output Gear: Learning from Experiences 

Materials: Suggested Read-aloud book(s): Choose Your Bully, Crow Boy, The Hundred Dresses, Leo the Late Bloomer; The Meanest Thing to Say, The Treasure Hunt,
"Be The Brain" Activity Cards, foam brain model, art supplies, drawing paper
Additional Materials: TNT Graphic (supplemental materials)

1. Introduce the Skill: Learning From Experiences means: Reflecting (thinking) about an experience you've had and selecting what to do the next time, either in the same way OR differently. Have you ever said to yourself, "I'll never do *that* again!" When your brain takes a wrong turn and you make a mistake, that's OK! We all make mistakes! Ask yourself what you learned from the experience and prepare your brain for *the next time*!
Some examples are: Making a mistake but not repeating it; Repeating successful outcomes; learning something from every situation; Changing a negative experience into a positive one
2. Read-Aloud: Read a suggested story. What did the characters learn from their experiences? Have you ever experienced something similar? Would you have done something differently to handle their situations or your own?
3. Process the Skill: "Be The Brain" (BTB) Activity Cards on the bottom of page
4. AAA Extension: How do you use Learning from Experiences in your work? At home? With family/friends?
5. Application: Use paper and art supplies to make mini-mural poster depicting the cognitive strategy of Learning from Experiences. Slogan examples: TNT (The Next Time…); Live and Learn; Learn something new each day; It's OK to make a mistake; mistakes are good teachers
6. Extension: Think of a mistake you made recently. Use TNT (The Next Time) to think about what you could do to change the outcome next time. Make a TNT poster to hang in class, at home, or place it on your notebook as a reminder. Try journaling, too.

BTB Card #1  Justin earned a poor grade in Language Arts on his report card this term. He realized that he did not study for spelling tests or put much thought into his written work. Justin likes to do well in school. How can Justin use Learning From Experiences to bring up his grade for the next report card?	BTB Card #2  Michael's teacher frequently points out Michael's sloppy handwriting. He has been rushing through his writing lately and the teacher cannot read his assignments. How can Michael use Learning From Experiences to improve his handwriting?
BTB Card #3  Gabe arrived at Joey's birthday party 30 minutes late, missing part of the Magic Show. Gabe knows he should wear a watch, but he still has trouble telling time. How can I use Learning From Experiences to be more punctual for scheduled events?	BTB Card #4  Madison was upset and said something to make her best friend cry. She didn't mean it but sometimes has trouble controlling her temper. What can Madison do to learn from this experience and avoid saying the wrong thing when she is upset?

Evaluation and Student Assessment

The BIG goals and objectives can be evaluated in a variety of ways. The following point rubric is suggested for assessing student work for each section of study. Maximum point values are indicated.

BIG Concepts	Participation Points	Effort Points	Neatness Points
Brain Basics	10	10	10
Input Gear	30	30	30
Processing Gear	30	30	30
Output Gear	30	30	30
TOTALS:	100	100	100

The BIG Cognitive Concepts can also be evaluated through evidence of the students' generalization of each skill during regular class work. For this type of evaluation, student portfolios, documented teacher observation, student grades, and/or assessment scores indicating improvements in overall student achievement are suggested.

Student self-assessment can also serve as a valuable evaluation tool, which reinforces students' metacognitive thinking skills. This adaptation of Marzano's Effort vs. Achievement Rubric is a great way for students to think about their own input and output of their schoolwork. It can be used with any assigned task or test in the classroom and can be administered to the student *before* the assignment. Students predict their level of effort and achievement before the task, and then check their predictions later with what they actually earned on the assignment.

Effort vs. Achievement Rubric

Scale: 4=super 3=good 2=improvement needed 1= undesirable

Effort	Achievement
__4. I worked on the task until it was completed and did not give up when it became difficult. I used the strategies I have been taught and continued working until I was certain I had done my best work.	__4. My grade is an A
__3. I worked on the task until it was completed and pushed myself when it became difficult. When finished, I felt like I did a pretty good job.	__3. My grade is a B
__2. I put some effort into my work, but when it became difficult, I stopped or just wrote down anything.	__2. My grade is a C
__1. I put very little effort into my work, either by working too quickly, writing down anything, or giving up without finishing.	__1. My grade is a D/F
Prediction Score ____ Actual Score _____	Prediction Score___ Actual Score___

Recommended Resources

Suggested Resource List for Teaching Cognitive Thinking Skills

Websites

Neuroscience For Kids: http://faculty.washington.edu/chudler/neurok.html
Make Your Own Brain Hat: http://www.ellenjmchenry.com/sitebuildercontent/sitebuilderfiles/brainhat.pdf
Build Your Own Brain: http://virtuallabs.stanford.edu/tech/images/BrainBoxActivity.SU-Tech.pdf
Brochure Creator: www.mybrochuremaker.com –create and print brochures with key points from your BIG lessons
Great "Brain" Website for Kids with Learning Differences and Teacher Resources: http://www.sparktop.org/
Great Lesson plans, games, free materials: http://www.brainsrule.com/index.htm
Multiple Intelligences and Learning Styles Inventories: http://www.education-world.com/a_lesson/03/lp319-01.shtml

Suggested Books for BIG Lesson Plans

Brain Gym P. and G. Dennison
Young Genius: Brains K. Lennard
The Great Brain Book H.P. Newquist
My Place In Space R. and S. Hirst
Communication Aliki
My Nasty Backpack A.Z. Nolan
Amber on the Mountain T. Johnston
Crow Boy T. Yashima
The Blue Day Book For Kids B.T. Greive
It's Not Fair B. Moses
Leo The Late Bloomer R. Kraus
Author: A True Story H. Lester
Cory Stories J. Kraus
Annie's Plan J. Kraus
Is Your Mama A Llama? D. Guarino
Salt In His Shoes D. Jordan
Michael's Golden Rules D. Jordan
Fables A. Lobel
The Meanest Thing to Say B. Cosby
Money Troubles B. Cosby
The Treasure Hunt B. Cosby
Somewhere Today B. Kitchen
You Read To Me, I'll Read To You M.A. Hoberman
Grouchy Ladybug E. Carle
The Hundred Dresses Eleanor Estes
Two Bad Ants C. Van Allsburg
Cam Jensen Books (Mystery Series) D. Adler

Recommended Resources

This is a supplemental book list for teaching the BIG Lesson Plans. Many cognitive skills can be taught from these additional selected titles. The skill of *Summing It Up* can be used for each of these fiction titles.

Freckle Juice, J. Blume - Goal Setting, Planning and Sources, Point Of View, Essential Focus, Learning From Experiences

The Very Hungry Caterpillar, E. Carle – Time and Space Awareness, Learning From Experiences

Koala Lou, M. Fox – Goal Setting, Taking Initiative, Essential Focus, Courageous Learning, Follow-Through Power

Rainbow Fish, M. Pfister – Problem Clarity, Courageous Learning, Learning From Experiences

Make Way for Ducklings, R. McCloskey– Problem Clarity, Essential Focus, Courageous Learning

Sheila Rae, The Brave, K. Henkes – Courageous Learning, Point Of View

Wemberly Worried, K. Henkes – Optimistic Attitude, Courageous Learning

Corduroy, D. Freeman – Goal Setting, Point of View

Ferdinand, M. Leaf – Point of View, Courageous Learning

Verdi, J. Cannon - Optimistic Attitude, Point of View, Flexible Thinking, Learning from Experiences

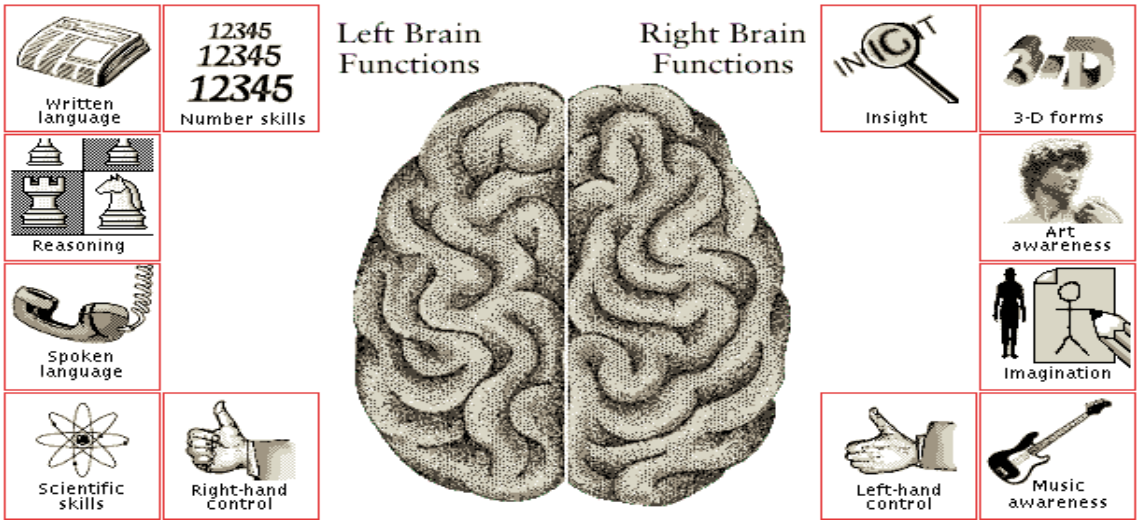
Pinduli, J. Cannon – Optimistic Attitude, Point of View, Flexible Thinking, Mindful Expression, Learning from Experiences

Stella Luna, J. Cannon – Optimistic Attitude, Point of View, Flexible Thinking, Learning from Experiences

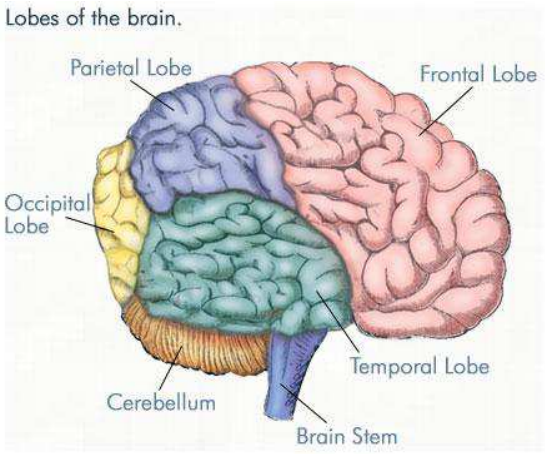
Choose Your Bully, L. Jamison – Problem Clarity, Planning and Sources, Classify and Compare, Learning from Experiences

Brilliant Brain Basics

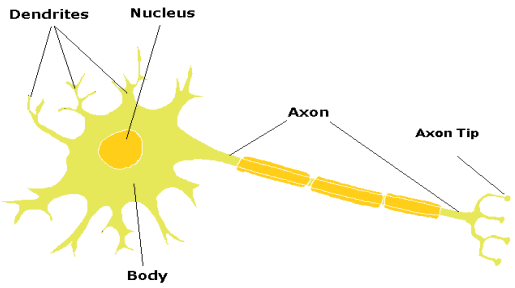
Hemispheres of the Brain

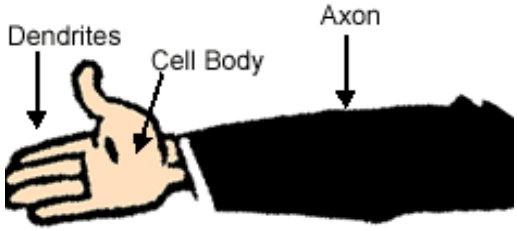


Lobes



Neurons





Start Your Ignition with METACOGNITION!

Metacognition is thinking about thinking. Monitoring your thoughts helps you *drive* your brain with control! Only YOU can steer your brain in the right direction!

Think of a Traffic Light when guiding your brain:


GREEN: Go, Rev your engine, React, Ask a question, Answer, Speak, Express yourself


YELLOW: Slow down and think about it, Transition time, A new subject is coming, Pause your brain, Think it through

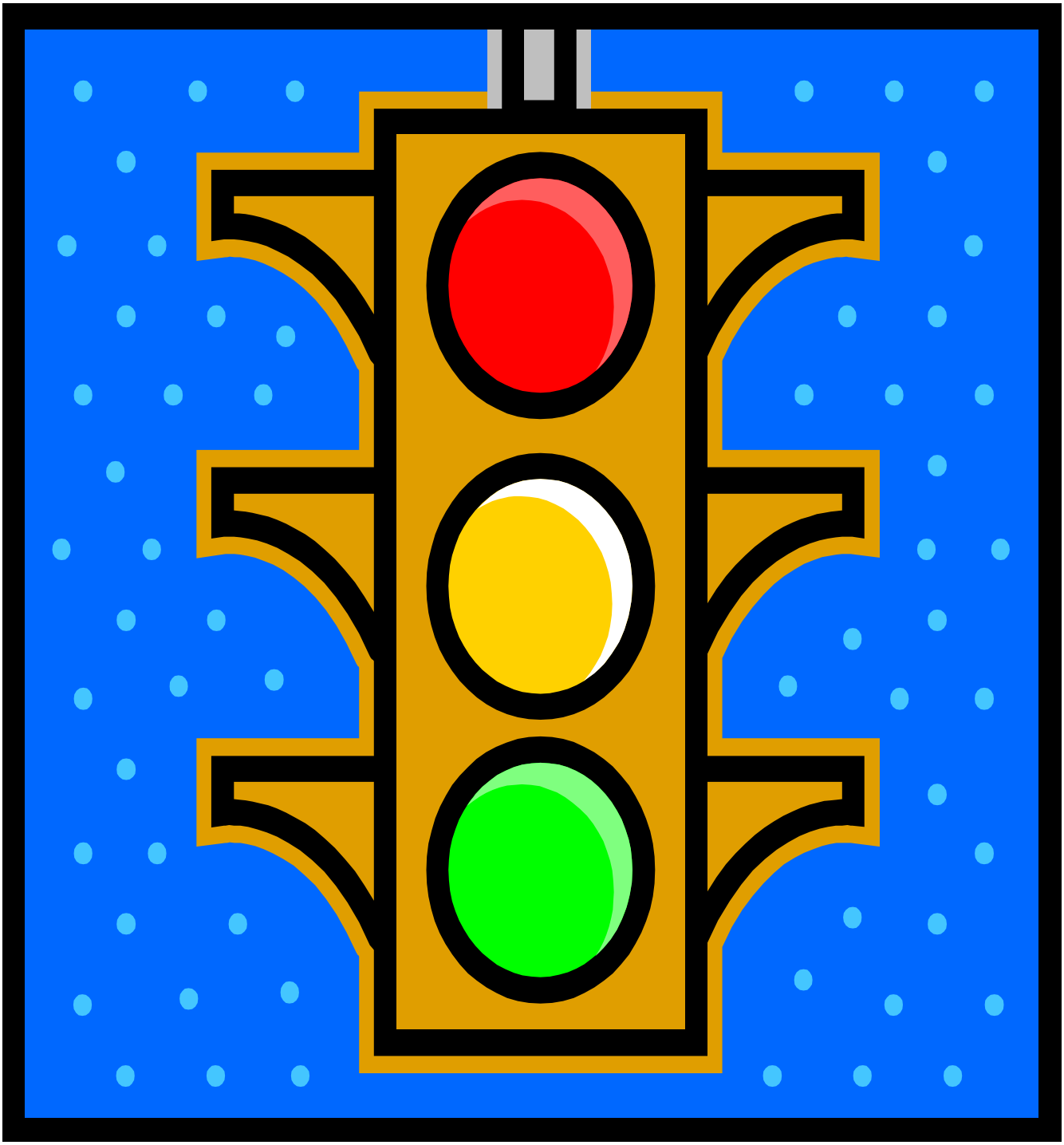

RED: STOP! Put on the brakes, Before saying the wrong thing or interrupting: STOP your brain, Change your thinking

"METACOG-LOG" QUESTIONS:

Answer these questions in your journal and discuss.

How can metacognition help me with relationships with friends/family/teachers?
What should I remind my brain about before I speak?
How can my new knowledge of the brain help me do better in school?

Think of a traffic light when you need to change your thinking.
STOP yourself. **SLOW DOWN** and think it through. Now you are ready to **GO**, and respond in an appropriate manner! This can be used with many of your BIG Thinking Skills!



The Bulls-Eye Target can help you to visualize your goals!

Control the Weather in Your Brain

The rainbow works as a bridge to help you change your thinking!

"I can't do this."

"I'm bored."

"This is hard."

"I hate…."

"When I think negative thoughts, I create stormy weather in my mind."

"I can do anything!"

"This might be fun!"

"That was easy!"

"I like…."

"When I think positive thoughts, I create sunny weather in my mind."

ESSENTIAL FOCUS

Help! I can't stay focused!

Why not?

Inside Distractions	Outside Distractions
Hunger	Noises
Bathroom needs	Family member/pet
Tired	Classmates
Thoughts of_____	Television

Can you think of any other distractions that may keep you from concentrating?

List them here:

_____
_____
_____
_____
_____

Meaning and Memory

RAINBOW RECALL Memory Strategy

1. How many colors are said to be in a rainbow?

2. How many chunks of information can our brains remember at one time?



Seven is a very special number. There are  days in the week,  openings in our head, 7 seas,  continents and many more important *seven*s!

Try this strategy for remembering new information:
Draw a *rainbow* on your paper. In each color, write one thing you need to remember! Look at one color at a time, reading/saying the new information to yourself or with a study partner. Use this technique with any subject! This colorful strategy can help you increase attention, retention, and recall of important information! For example, write one multiplication fact in each color of the rainbow, memorizing one fact (one color) at a time. Soon, you will have memorized seven new facts!

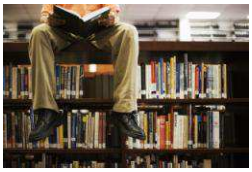
Making Meaning At Home

The human brain is on a constant search for meaning. Enriching experiences help us to make meaning (understanding) of new concepts as they are introduced to us. There are many wonderful ways to create new, enriching, and memorable experiences without spending money!

AAA (Ask An Adult): Please try one (or more) of these experiences with me to help my brain make meaningful memories:

_____1. Go to a PET STORE and explore animals: Compare and contrast types of dogs, cats, reptiles, fish. Ask an expert in the store any questions you have about the animals that interest you. It's like going to the zoo without paying an entrance fee! You can go home and research more about animals on the internet! Draw pictures of the animals you saw at the store.
_____2. Go to the LIBRARY: I am sure I do not have to tell you that almost any information can be found here! What are you studying in school right now? What topic interests you? Grab a few non-fiction books about history, geography, animals, cultures, biology (the brain), horticulture (Don't know what that is? Ask a librarian to help you find a book about it!). Compare and contrast the books you find on your topic. Draw a picture of something new you learned!
_____3. Go to the *Whole Foods Market*: This is a wonderful, healthy grocery store where you will usually find free samples of fruits, cheeses, and snacks (especially on the weekends). Plus you can ask for samples of prepared foods at the counter to try new taste sensations. Even if you do not purchase anything, you'll leave the store having had a new sensory experience: seeing, smelling, and tasting new, delicious foods.
_____4. Go on a NATURE WALK: Walk to a nearby park or even your own backyard! See what interesting specimen you can find: an insect you've never seen before, a pretty bird, a lizard catching ants, an interesting plant or rock or shell. You never know what you'll find when you are really focusing on your natural environment. This can make for a meaningful event.
_____5. Go to your KITCHEN: Your very own kitchen is filled with fun things to explore. Do you know what a whisk does? A sieve? A garlic press? A mortar and pestle? Ask an adult (AAA) to help you explore kitchen gadgets in your very own home and discuss the purpose of each item. Try them out with real food or think of NEW ways to use them! Use dry pasta, beans, rice, flour, or water to practice your measuring skills with measuring cups and spoons. AAA to help you prepare your favorite recipe. There is so much to learn when you *play* in the kitchen. You will have fun and make *meaningful* memories!

By having these fun, educational experiences, you are creating memories that will help your brain understand other new information as it comes your way! It's a wonderful cycle of learning! Have fun learning, making meaning, AND creating new memories in your BRILLIANT BRAIN!

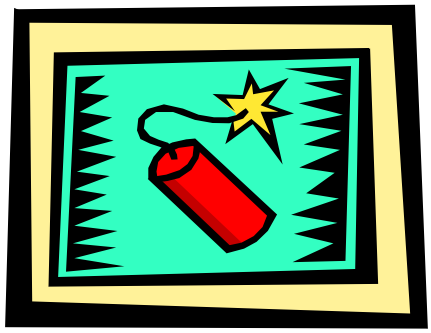


My Metacog-Log For Researching a Topic of Study

1. Subject/Topic_____
2. What do I already know about this topic?_____
3. What information do I need to find out?
   - What? _____
   - Why?_____
   - How?_____
   - When?_____
   - Where?_____
4. What organizational tools will help me develop my ideas?
   - __Index cards
   - __Highlighting
   - __Drawing
   - __Making a List
   - __Brainstorming
   - __Outlining
   - __Margin Notes
   - __Reading aloud
   - __Sticky Notes
   - __Other:_____
5. What resources will help me find my information?
   - __Books
   - __Magazines
   - __Atlas
   - __Dictionary
   - __Website(s)_____
   - __Online searches_____
   - __Other:_____
6. What thinking strategies will help me get the grade that I want?
   - ___Goal Setting
   - ___Optimistic Attitude
   - ___Taking Initiative
   - ___Planning and Sources
   - ___Focus/Using time wisely
   - ___Classifying and Comparing
   - ___Problem Clarity
   - ___Summing It Up
   - ___Making Connections/Making Meaning
   - ___Mindful Expression
   - ___Follow-through Power
   - ___Other:_____
7. What level of effort will I use on this activity?
   - __1: A little effort
   - __2: Some effort
   - __3. A lot of effort
   - __4. My best effort

Learning From Experience

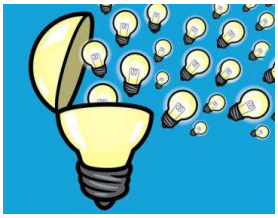
"TNT"



The Next Time

The Key to Wisdom:
Not *what* happens to us, but what we *LEARN* from what happens to us.

Adaptor and Adaptation Ideas



The Brain: Since the brain is our indispensable learning tool, create a project that focuses on the brain, and extends beyond Brain Basics to help students better understand the power of the human brain. Use innovative hands-on activities and/or experiments. Be sure to include brain-teasers, puzzles, and other challenging activities. Create a Brain Learning Center in your classroom.

The BIG Cognitive Concepts: Choose one necessary cognitive skill to adapt into a complete program of its own. Does one skill stand out in your mind as essential to your program? Create a project around it to educate your students about this critical skill.

Elementary Adaptations: Create songs/rhymes for teaching the cognitive skills; Create a character to represent each skill; Have a "Think Tank" section of the classroom to house books, props, and other cognitive skill related items for student use.

Middle and High School: Expand upon the Ask An Adult (AAA) interview section of each lesson, having students conduct further research into how adults use the skills in the workplace. This is great for Career Education and real world experiences.

Cross-Curriculum: Cognitive skills are life-long skills and span every subject area and grade level. These skills can be taught explicitly in core subject areas as well as elective subjects such as Art, Music, Physical Education (P.E.), Foreign Language classes, etc. The following are some examples:

Math: How can I use Classify and Compare in my Geometry homework? How can I use Problem Clarity to solve an equation?
Science: How do I use Cues and Inference when forming a hypothesis? How can I use Summing It Up to share my research?
P.E.: How will Goal Setting help us during Field Day? How will Optimistic Attitude help if I do not hit the ball?
Art: How can I use Mindful Expression in my art work? How can I use Follow-through Power to complete an art project?

One of our now-famous Brain Jello Molds!

Suggested Budget

The following is a list of suggested items to enhance the BIG lessons. This program favors those on a limited budget. Many of the recommended books can be found in the school library or your own classroom library. For this reason, the estimate on the price of books has been kept low. Keep in mind that you are not limited to the program's book suggestions. Many additional book choices can be used to enhance the teaching of cognitive skills. Office and art supplies may also be available at your school site, so this cost has also been estimated. If you are able to borrow hula-hoops from your school's Physical Education department, you will save money on those, as well.

Item	Suggested Vendor(s)	Quantity	Total Price
Suggested Books	Walmart, Borders, Amazon.com	various	Estimated $100
Office Supplies: (folders, spiral notebooks, index cards, dot stickers, art supplies)	Staples, Office Max, Walmart, Office Depot	Class Set	Estimated $100
Foam Brain Model	Oriental Trading.com	1	$14.95
Brain Gelatin Mold	Neuromart.com	1	$11.95
Magnifying Glass	Walgreens, Walmart	6 @ $1	$6.00
Hula Hoops (Build Your Own Activity Hoops)	OrientalTrading.com	1	$19.99
Stress-Free Debriefing Tools, Essentials (Foam squeeze balls)	Trainerswarehouse.com	1	$29.95
Stickers, Reward Certificates	OrientalTrading.com	Class Set	Estimated $30
Flavored Gelatin Boxes	Walmart, Publix	20 @ .50 each	$10.00
ESTIMATED SHIPPING COSTS			$50

Total Estimated Budget: $373.80

Additional Items: Other motivational items can be found using internet searches. Brain themed hats, shirts, pencils, erasers, stickers, magnets, buttons, posters, and other novelty items are fun enhancements to the program. Don't forget puzzles (two and three dimensional), brain teasers, and trivia games are great for keeping brains sharp!

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