



**Understanding The Brain And Its Role In Personal  
Decisions**

An Instructional Unit

By **Carmen Sánchez Sadek, Ph.D.**, Teacher

8<sup>th</sup> Grade

**8<sup>th</sup> Grade English**

Creative Writing and Skills

*How can we make successful personal decisions by  
understanding our brains?*

How can the Deep Limbic System help a student make successful personal decisions?
How can the Basal Ganglia help a student make successful personal decisions?
How can the Pre-frontal Cortex help a student make successful personal decisions?
How can the Cingulate help a student make successful personal decisions?
How can the Temporal Lobes help a student make successful personal decisions?

**Foshay Learning Center**

Track B

### Introduction

- Student assessment outcomes
- In what respects and for what reasons the unit has been revised
- Acknowledgements
- Bibliography (Refer to back of *Task Completion Form* to find correct forms for various types of listings).

This Unit on Understanding The Brain And Its Role In Personal Decisions was designed for all my 8<sup>th</sup> grade students in my English 8 and Creative Writing and Skills classes at Foshay Learning Center in the LAUSD. Most of my students are Hispanic and most also are working hard to achieve re-designation as English Language Proficient before entering high school in the 9<sup>th</sup> grade.

I have three main goals: (1) To help my students successfully achieve and perform in the LAUSD Culminating Task and Periodic Assessment for Research and Exposition; (2) To engage my students in brain research with the idea of helping them understand their own conduct, behaviors and ways of performing in class and school; and (3) To help my students change and improve their class and school conduct, behaviors and performances so they are successful in their personal decisions. I expect my students to function at the level of self-direction by the end of this school year and to experience success academically, socially and emotionally by making more effective personal decisions.

My central or overarching question comes directly from the main content area source of information I selected: “Change Your Brain / Change Your Life” by Daniel G. Amen, M.D.: *How can we make successful personal decisions by understanding our brains?* In mastering the information about the brain, and through additional sources of information, I also fulfill the writing assessment and performance requirements of the LAUSD for the 8<sup>th</sup> grade. I also selected –as required—the LAUSD RESEARCH AND EXPOSITION UNIT, including selected activities from the 7 Modules and lessons included in this required unit. My hopes are that my students become effective decision makers by understanding and research the brain and its role in personal decisions.

While implementing the designed and required instructional activities in this unit, I will help my students at the computer lab (PDC) and at the library, and I will make extensive use of my ELMO which allows me to access the Internet for research purposes. Unfortunately, I believe I will be a “traveling teacher” during the last “mester” (8 weeks) of instruction in 2008. Physically, then, the classroom setting may not be very helpful since I will be using other teachers’ classrooms as “my classroom.”

All assessments in this unit were pre-selected by the LAUSD (Culminating Task and Periodic Assessment) and the End-Of-Unit-Assessment here designed is fully aligned with the required assessments.

## Relationship of Unit to Curriculum

Prerequisite or relevant content/skill standards addressed in prior units, or earlier grades	Content/skill standard learning goals of Unit	Future content/skills for which proficiency in the knowledge and skills of this unit are required
<p>Ss recognize, name and identify by coloring the different parts / systems of the brain, specifically the five parts or systems emphasized in this unit.</p> <p>Ss understand the relationship between brain functions and behaviors.</p> <p>Ss recognize and read samples of expository writing, especially research reports. Ss research topics of interest through the Internet and recognize: Thesis, direct quotations, paraphrasing, perspective and summaries.</p> <p>Ss recognize and use in their Internet research reliable and respected primary and secondary sources of</p>	<p>Students will identify and try to overcome behaviors that hold them back from success by studying the following five brain systems:</p>	<p>Ss continue developing a deep understanding of the workings of the human brain and how effective behavior is helped by healthy brain habits and nutrition.</p> <p>Ss also understand medical prescriptions that optimize brain effectiveness.</p> <p>Ss thoughtfully use reliable, respected and appropriate sources of information to continue to write research reports in many of their content area classes, such as Science and Social Studies.</p>
	1. Deep Limbic System	
	2. Basal Ganglia	
	3. Pre-frontal Cortex	
	4. Cingulate	
5. Temporal Lobes		
	<p>Student will identify brain-based prescriptions to optimize brain effectiveness:</p> <ol style="list-style-type: none"> <li>1. Behavioral Prescriptions</li> <li>2. Cognitive Prescriptions</li> <li>3. Nutritional Prescriptions</li> </ol>	
	<p>W 2.3 Write research report:</p> <ol style="list-style-type: none"> <li>a. Define a thesis.</li> <li>b. Record important ideas, concepts, and direct quotations from significant information sources and paraphrase and summarize all perspectives on the topic, as appropriate.</li> <li>c. Use a variety of primary and secondary sources and distinguish the nature and value of each.</li> <li>d. Organize and display</li> </ol>	

<p>information. Ss read information provided in charts, maps, graphs and other types of visual displays. Ss recognize and read the findings and conclusions of research reports, pointing out opinion from authorities, comparisons, etc. Ss identify research information and original ideas provided by researchers. Ss understand and practice the steps in the Writing Process.</p> <p>Ss recognize and rate various visual presentations as means to communicate information, especially in advertising, research reports and other means of information. Ss read exemplary research reports with UNITY, COHERENCE, LOGIC and effective choice of the STRUCTURAL PATTERN of the research report TEXT. Ss practice correct and grammatical expression and writing conventions.</p>	<p>information on charts, maps, and graphs.</p> <p>W 1.3 Support theses or conclusions with analogies, paraphrases, quotations, opinions from authorities, comparisons, and similar devices.</p> <p>W 1.5 Achieve an effective balance between research information and original ideas.</p> <p>W 1.6 Revise writing for word choice, appropriate organization; consistent point of view; transitions between paragraphs, passages and ideas.</p> <p>LS 1.9 Interpret and evaluate various ways in which visual image makers (e.g., graphic artists, illustrators, news photographers) communicate information and affect impressions and opinions.</p> <p>R 2.7 Evaluate the unity, coherence, logic, internal consistency, and structural patterns of text.</p> <p>LC 1.4 Edit written manuscripts to ensure that correct grammar is used.</p> <p>LC 1.5 Use correct punctuation and capitalization.</p> <p>LC 1.6 Use correct spelling conventions.</p>	<p>Ss use visual information displays to enhance understanding of their research findings in content areas. Ss findings and conclusions correctly use analogies, paraphrasing, comparisons, quotations and cite respected and well-known authorities. Ss use other devices to convey findings and conclusions. Ss espouse original ideas, their own or others' while presenting research information in an unbiased form. Ss take great care to write, re-write, edit and finally publish their writing reports.</p> <p>Ss design visual representations to effectively communicate findings and research information.</p> <p>Ss continue to consider in editing their research reports the UNITY, COHERENCE, INTERNAL CONSISTENCY and the most appropriate STRUCTURAL PATTERN of the research report TEXT. Ss master English technical writing skills</p>
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**III. Unit Sequencing Plan:** Assign each lesson in the unit a sequential number. Write Topic(s) of each lesson. Enter dates you plan to teach each lesson.

Lesson number	Brief Description	<i>Length of Lesson</i>
	Standards	Lesson
1.	<p>“When your brain works right, so can you! When your brain doesn’t work right, neither can you!”</p> <p>Students will identify and try to overcome behaviors that hold them back from success by studying the following five brain systems:</p>	3 hrs.
2.	<p>1. Deep Limbic System</p> <p>How can the Deep Limbic System help a student make successful personal decisions? Where? What does it control? Influences</p>	3 hrs.
3.	<p>2. Basal Ganglia</p> <p>How can the Basal Ganglia help a student make successful personal decisions? Where? What does it control? Over-active Under-active Influences</p>	3 hrs.
4.	<p>3. Pre-frontal Cortex</p> <p>How can the Pre-frontal Cortex help a student make successful personal decisions?</p>	3 hrs.

Lesson number	Brief Description	<i>Length of Lesson</i>
	Where ? What does it control? Influences	
5.	4. Cingulate  How can the Cingulate help a student make successful personal decisions? Where? What does it control? Under-active Influence	3 hrs.
6.	5. Temporal Lobes  How can the Temporal Lobes help a student make successful personal decisions? Where? What do the Temporal Lobes control? Over-active Influence	3 hrs.
7.	“Why do you do what you do and what can you do about it?”  Student will identify brain-based prescriptions to optimize brain effectiveness: 4. Behavioral Prescriptions 5. Cognitive Prescriptions 6. Nutritional Prescriptions	3 hrs.
8.	W 2.3 Write research report: a. Define a thesis. b. Record important ideas, concepts, and direct quotations from significant information	3 hrs. Lessons selected from: Los Angeles

Lesson number	Brief Description	<i>Length of Lesson</i>
	<p>sources and paraphrase and summarize all perspectives on the topic, as appropriate.</p> <p>c. Use a variety of primary and secondary sources and distinguish the nature and value of each.</p> <p>d. Organize and display information on charts, maps, and graphs.</p>	<p>Unified School District English/Language Arts Middle School Exposition/ Research Instructional Services</p>
9.	<p>W 1.3 Support theses or conclusions with analogies, paraphrases, quotations, opinions from authorities, comparisons, and similar devices.</p>	<p>3 hrs. Lessons selected from: Los Angeles Unified School District English/Language Arts Middle School Exposition/ Research Instructional Services</p>
10.	<p>W 1.5 Achieve and effective balance between research information and original ideas.</p>	<p>3 hrs. Lessons selected from: Los Angeles Unified School</p>

Lesson number	Brief Description	<i>Length of Lesson</i>
		District English/Language Arts Middle School Exposition/ Research Instructional Services
11.	W 1.6 Revise writing for word choice, appropriate organization; consistent point of view; transitions between paragraphs, passages and ideas.	3 hrs. Lessons selected from: Los Angeles Unified School District English/Language Arts Middle School Exposition/ Research Instructional Services
12.	LS 1.9 Interpret and evaluate various ways in which visual image makers (e.g., graphic artists, illustrators, news photographers) communicate information and affect impressions and opinions.	3 hrs. Lessons selected from: Los Angeles Unified School District

Lesson number	Brief Description	<i>Length of Lesson</i>
		English/Language Arts Middle School Exposition/ Research Instructional Services
13.	R 2.7 Evaluate the unity, coherence, logic, internal consistency, and structural patterns of text.	3 hrs. Lessons selected from: Los Angeles Unified School District English/Language Arts Middle School Exposition/ Research Instructional Services
14.	LC 1.4 Edit written manuscripts to ensure that correct grammar is used.	3 hrs. Lessons selected from: Los Angeles Unified School District

Lesson number	Brief Description	<i>Length of Lesson</i>
		English/Language Arts Middle School Exposition/ Research Instructional Services
15.	LC 1.5 Use correct punctuation and capitalization.	1 hr. Lessons selected from: Los Angeles Unified School District English/Language Arts Middle School Exposition/ Research Instructional Services
16.	LC 1.6 Use correct spelling conventions.	3 hrs. Lessons selected from: Los Angeles Unified School District English/Language Arts

Lesson number	Brief Description	<i>Length of Lesson</i>
	<p>At Foshay Learning Center Library</p> <p><b>Bibliography and Acknowledgements</b></p> <p><b>Include programs or textbooks used, if any, references, online sources used, sources of graphic and audio-visual materials.</b></p> <p><b>Include acknowledgements of collegial help and ideas</b></p> <p><b>Citations: Style Sheet</b></p> <p>REVIEW: Overarching Central Question: How can we make successful personal decisions by understanding our brains?</p> <p>Sub-questions    How can the Deep Limbic System help a student make successful personal decisions?</p>	<p>Middle School Exposition/ Research Instructional Services</p>

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<b>Lesson number</b>	<b>Brief Description</b>	<i>Length of Lesson</i>
	How can the Basal Ganglia help a student make successful personal decisions? How can the Pre-frontal Cortex help a student make successful personal decisions? How can the Cingulate help a student make successful personal decisions? How can the Temporal Lobes help a student make successful personal decisions?	
	END-OF-UNIT-ASSESSMENT	5 – 6 DAYS

# LESSONS

## IV. Lesson Plans

<b>Lesson No.</b>	1	<b>Title</b>	“When your brain works right, so can you! When your brain doesn’t work right, neither can you!”
<b>Goals of Lesson</b>	Students will identify and try to overcome behaviors that hold them back from success by studying 5 brain systems: (1) Deep Limbic System; (2) Basal Ganglia; (3) Pre-frontal Cortex; (4) Cingulate; (5) Temporal Lobes.		
<b>Student “thinking-pulling” Questions for the Lesson</b>	What helps you achieve success at school? What do you do to achieve success at school?		

<b>Time per step (Best estimate)</b>	<b>Student activities at each step (What the students are doing)</b>	<b>Anticipated ▪ Student response ▪ Questions &amp; Misconceptions ▪ Errors at each step</b>	<b>Teacher’s support of student learning and Points to remember (Including planned teacher responses to “Anticipateds”</b>	<b>Materials and resources needed for each step</b>
<b>Intro-1 hr.</b>	<b>Ss list the conducts, behaviors, activities that help them achieve success at school.</b>	In listing “conduct, behaviors and activities,” Ss may use adjectives (i.e., “being good”) instead of verbs (i.e., I write down my homework.)	T. may share her experiences in Lesson Design and the reasons for developing this unit.  T. may share her own learning in preparing and designing this unit.	<b>Daniel G. Amen, M.D. “Change Your Brain / Change Your Life” Introduction (Pages 3-36)</b>  <b>See below: Supplementary Materias for Lesson 1</b>

			T. may co-teach this unit with Science teacher(s) to help students better understand the connections between content areas and writing skills.	<b>Foshay Learning Center Library Resources</b>
<b>Develop-1 hr.</b>	<p><b>Ss learn about the 5 brain systems they will study in this unit--</b></p> <p><b>Vocabulary Development:</b></p> <p>(1) Deep Limbic System;  (2) Basal Ganglia;  (3) Pre-frontal Cortex;  (4) Cingulate;  (5) Temporal Lobes.</p> <p><b>Ss locate “Where?” each of the 5 brain systems is located.</b></p> <p><b>Ss color each of the systems in provided “PHYSIOLOGY COLORING BOOK” (Page 83)</b></p> <p><b>Ss research brain systems at Computer Lab (PDC)</b></p>	Ss may question why we study the brain in English class. Introduction to Expository Writing for Periodic Assessment may be needed at this point.		<p><b>“Physiology Coloring Book” Kapit / Macey / Meisami “The Physiology Coloring Book” (Page 83)</b></p> <p><b>Internet Research at Computer Lab (PDC) and in the classroom (ELMO)”</b></p>
<b>Conclude</b>	<b>Ss review each of the 5 introduced</b>	Class will go to PDC		

<b>1 hr.</b>	<b>systems and chart “What does it control?”</b>	for virtual displays of brain systems. Individual PDC work needed by Ss.		
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<b>Mid-unit Assessment(s) Embedded in above Lesson</b> (In order to monitor student learning and engagement)
Sharing colored brain systems –
<b>Evaluation Questions</b> After-teaching questions about effectiveness of the lesson related to the learning goals (Did the students ...? )
<p>Did the students list at least 20 behaviors, conducts, activities that help them achieve success at school?</p> <p>Did the students master the technical vocabulary of brain systems?</p> <p>Did the students color the brain systems correctly?</p> <p>Did the students find visual displays of the brain and brain systems emphasized in this unit?</p> <p>Did the students find ‘What does each system control?’ through their Internet research assignment?</p>
Broader after-the-lesson reflections

# Supplemental Material for Lesson #1

Given the following “FUNCTIONS” of the 5 brain systems to be studied in this unit, teacher may help students complete the list of conducts, behaviors and activities that help students achieve success at school (and in real life!)

Examples:

Sets the emotional tone of the mind

Filters external events through internal states (creates emotional coloring)

Tags events as internally important

Stores highly charged emotional memories

Modulates motivation

Behavior: I express happiness to be at school

Conduct: I think all class activities are important

Conduct: I remember good things about my day

Behavior: I want to do every assignment

Control appetite and sleep cycles

Promotes bonding

Directly processes the sense of smell

Modulates libido

Integrates feeling and movement

Shifts and smoothes fine motor behavior

Suppresses unwanted motor behavior

Sets the body's idle speed or anxiety level

Enhances motivation

Mediates pleasure / ecstasy

Attention span

Perseverance

Judgment

Impulse control

Organization

Self-monitoring and supervision  
Problem solving  
Critical thinking  
Forward thinking  
Learning from experience  
Ability to feel and express emotions  
Interaction with the Limbic System  
Empathy

Ability to shift attention.  
Cognitive flexibility.  
Adaptability.  
Movement from idea to idea.  
Ability to see options.  
Ability to “go with the flow.”  
Ability to cooperate.

Dominant Side (usually the left)  
Understanding and processing language  
Intermediate-Term Memory  
Long-Term Memory  
Auditory Learning  
Retrieval of words  
Complex memories  
Visual and auditory processing  
Emotional stability  
Non-dominant Side (usually the right)  
Recognizing facial expressions  
Decoding vocal intonation  
Rhythm  
Music and Visual learning

<b>Lesson No.</b>	2	<b>Title</b>	How can the Deep Limbic System help a student make successful personal decisions?
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<b>Goals of Lesson</b>	Students will master where the brain’s Deep Limbic System is located, what does it control and how to influence it to make successful personal decisions.
<b>Student “thinking-pulling” Questions for the Lesson</b>	What does the teacher, Dr. Carmen Sánchez Sadek mean when she says: “You are out of control!!!”

<b>Time per step (Best estimate)</b>	<b>Student activities at each step (What the students are doing)</b>	<b>Anticipated ▪ Student response ▪ Questions &amp; Misconceptions ▪ Errors at each step</b>	<b>Teacher’s support of student learning and Points to remember (Including planned teacher responses to “Anticipateds”)</b>	<b>Materials and resources needed for each step</b>
Intro-1 hr.	<b>Ss review the vocabulary and 5 brain systems emphasized in this unit by pointing to their “Physiology Coloring Book” assignment from the previous lesson. Also review of visuals from PDC Internet research, if any.</b>	Conceptualizing the brain and its parts and systems.	Co-operative teaching of this lesson (English & Science) may be very helpful.	<b>Same as in Lesson 1</b>
Develop-1 hr.	<b>Using Supplementary Material for this lesson, Ss list PRESCRIPTIONS for healthy Deep Limbic System</b>  <b>Ss list how they will apply to their daily conduct, behaviors and activities the information gained about the Deep Limbic System.</b>	This section on the Deep Limbic System may be rather overwhelming in its length and complexity and additional time may be needed.	Key idea is that Ss CAN and DO control their brains and CAN change their behavior purposefully.	<b>See below – Supplementary Material for Lesson 2</b>

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Conclude - 1 hr.	<b>Ss select at least 5 conducts that help them achieve success at school and begin to purposefully record their use or application of their “new” behaviors.</b>	Help Ss write and plan to log and tally their “new” behaviors, especially in class.		
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<b>Mid-unit Assessment(s) Embedded in above Lesson (In order to monitor student learning and engagement)</b>
Sharing students’ lists of “new” conducts and behaviors – Developing a class list
<b>Evaluation Questions</b> After-teaching questions about effectiveness of the lesson related to the learning goals
Did the students remember the names and correctly identify the 5 brain systems emphasized in this unit? Did the students use the PRESCRIPTIONS provided in the Supplementary Material to select 5 conducts that help them achieve success at school?
Broader after-the-lesson reflections

# Supplemental Material for Lesson # 2

## **The Deep Limbic System:**

### FUNCTIONS:

1. Sets the emotional tone of the mind
2. filters external events through internal states (creates emotional coloring)
3. tags events as internally important
4. stores highly charged emotional memories
5. modulates motivation
6. control appetite and sleep cycles
7. promotes bonding
8. directly processes the sense of smell
9. modulates libido

**WHERE:** The deep limbic system lies near the center of the brain. Considering its size—about that of a walnut—it is power-packed with functions, all of which are critical for human behavior and survival.

In this definition, the deep limbic system includes the thalamic structures, and hypothalamus, along with the immediate surrounding structures. All of these systems are complex and interconnected. From an evolutionary standpoint, this is an “older” part of the mammalian brain that enabled animals to experience and express emotions: one must have passion, emotion, and the desire to make something happen and the deep limbic system adds the emotional spice, in both positive and negative ways.

When the deep limbic system is LESS active, there is generally a positive, more hopeful state of mind. When it is heated up, or overactive, negativity can take over.

The deep limbic system, along with the deep temporal lobes, has been reported to be involved in STORING highly charged emotional memories, both positive and negative. The total experience of our emotional memories is responsible, IN PART, for the emotional tone of our mind.

The deep limbic system also affects motivation and drive. It helps get you going in the morning and encourages you to move throughout the day. Over-activity is associated with lowered motivation and drive. The hypothalamus controls the sleep and appetite cycles in the body. Healthy sleep and appetite are essential in maintaining a proper internal milieu.

The deep limbic structures are also intimately involved in bonding and social connectedness. The deep limbic system affects the bonding mechanism that enables a person to connect socially with other people; one's ability to do this successfully in turn influences one's mood.

The deep limbic system also directly processes the sense of smell. Smell can thus have a powerful impact on our feeling states.

#### PROBLEMS in the Deep Limbic System:

1. moodiness, irritability, clinical depression
2. increased negative thinking
3. negative perception of events
4. decreased motivation
5. flood of negative emotions
6. appetite and sleep problems
7. decreased or increased sexual responsiveness
8. social isolation

#### PRESCRIPTIONS:

1. *Kill The ANT's (Automatic Negative Thoughts)*  
STEP 1 – Realize that your thoughts are real.  
STEP 2 – Notice how negative thoughts affect your body.  
STEP 3 – Notice how positive thoughts affect your body.

STEP 4 – Notice how your body reacts to every thought you have.

STEP 5 – Think of bad thoughts as pollution.

STEP 6 – Understand that your automatic thoughts do not always tell the truth.

STEP 7 – Talk back to ANT's.

STEP 8 – Exterminate the ANT's.

#### TYPES of ANT's:

- A. "Always/Never" thinking – (Also: no one, everyone, every time, everything, etc.)
- B. Focusing on the negative – Seeing only the bad in a situation.
- C. Fortune telling – Predicting the worst possible outcome to a situation.
- D. Mind reading – Believing that you know what others are thinking, even though they have not told you.
- E. Thinking with your feelings – Believing negative feelings without ever questioning them. "I feel . . ." Look for the evidence behind the feeling.
- F. Guilt beating – Thinking in words like: "I ought to . . ." (should, must, have to, etc.)
- G. Labeling – attaching a negative label to yourself or to someone else.
- H. Personalizing – What others do is a reflection on me.
- I. Blaming – blaming others for own problems.

#### 2. Kill The ANT's / FEED YOUR ANTEATER

\* Your thoughts really matter.

\* They can either help you or hurt your deep limbic system.

\* Whenever you notice ANT's, you need to crush them or they will affect you.

\* If you can catch ANT's at the moment they occur and correct them, you take AWAY THE POWER ANT's HAVE OVER YOU!!!

\* Most negative thinking is automatic and goes unnoticed. YOU ARE NOT REALLY CHOOSING HOW TO RESPOND TO YOUR SITUATION, IT IS BEING CHOSEN FOR YOU BY BAD BRAIN HABITS.

\* Do NOT believe everything you hear—even in your own mind!!!

\* Whenever you notice an ANT entering your mind, talk back to the ANT and you begin to take away their power and gain control over your moods.

\* KILL THE ANT's BY FEEDING YOUR EMOTIONAL ANTEATER.

3. Surround Yourself With People Who Provide Positive Bonding

4. Protect Your Children With Limbic Bonding

- a. Spend 20 minutes a day with your child doing something that he or she would like to do.
- b. During this special time there are to be no parental commands, no questions and no directions.
- c. Notice as many positive behaviors on the part of the child as you can.
- d. Do much more listening than talking.

5. Build People Skills to Enhance Limbic Bonds

- a. How you get along with other people can either help or hurt your limbic system.
- b. The better you get along with those around you, the better you will feel!!!
- c. Take responsibility for keeping relationships strong. Do NOT blame others for relationship problems.
- d. Look for what you can do to improve relationships.
- e. Focusing on what you want in a relationship is essential to making it happen.
- f. Protect your relationships by building up the other person. NEVER discount, belittle or degrade the other person.
- g. ALWAYS assume the BEST about the other person. This will help his or her behavior to be more positive.
- h. Keep relationships “fresh.”
- i. Notice the GOOD. It takes real effort to notice what you like. When you spend more time noticing the positive, you are more likely to see an increase in positive behavior.
- j. Communicate clearly. Take time to really listen and understand. Do NOT react to what you think others mean. ASK what others mean.
- k. Maintain and protect TRUST.
- l. Deal with difficult issues: In a firm but kind way, stick for what you think is right. It will keep the relationship balanced.
- m. Make time for your relationships. Making your special relationship a “time investment” will pay dividends for years to come.

6. Recognize The Importance Of Physical Contact

7. Surround Yourself With Great Smells
8. Build A Library Of Wonderful Memories
9. Try Physical Exercise
10. Watch Your Limbic Nutrition

<b>Lesson No.</b>	3	<b>Title</b>	How can the Basal Ganglia help a student make successful personal decisions?
<b>Goals of Lesson</b>	Students will master where the brain’s Basal Ganglia is located, what does it control and how to influence it to make successful personal decisions.		
<b>Student “thinking-pulling” Questions for the Lesson</b>	What does the teacher, Dr. Carmen Sánchez Sadek mean when she says: “You are out of control!!!!”		

<b>Time per step (Best estimate)</b>	<b>Student activities at each step (What the students are doing)</b>	<b>Anticipated ▪ Student response ▪ Questions &amp; Misconceptions ▪ Errors at each step</b>	<b>Teacher’s support of student learning and Points to remember (Including planned teacher responses to “Anticipateds”</b>	<b>Materials and resources needed for each step</b>
Intro – 1 hr.	<b>Ss review the vocabulary and 5 brain systems emphasized in this unit by naming the systems and describing some of their “new” behaviors identified in mastering the Deep Limbic System.</b>	Conceptualizing the brain and its parts and systems.	Co-operative teaching is highly recommended.	<b>Same as for Lessons 1 &amp; 2 Plus any additional brain research reports submitted by Ss.</b>
Develop- 1 hr.	<b>Using Supplementary Material for this lesson, Ss list PRESCRIPTIONS for healthy Basal Ganglia.  Ss list how they will apply to their</b>	This is also a rather lengthy and overwhelmingly complex lesson and more time may be	Ss will profit by using Internet to research each of the 5 brain systems in this unit. Library resources are	<b>See below – Supplementary Material for this lesson.  VISUALS about the</b>

	<b>daily conduct, behaviors and activities the information gained about the Basal Ganglia.</b>	needed.	also very important. Visuals are an integral part of this lesson.	<b>brain.</b>
Conclude - 1 hr.	<b>Ss select at least 5 conducts that help them achieve success at school and begin to purposefully record their use or application of their “new” behaviors.</b>	Help Ss write and plan to log and tally their “new” behaviors, especially in class.		<b>ELMO – Review of Supplementary Material for Lessons 1 and 2 and for this lesson.</b>

<b>Mid-unit Assessment(s) Embedded in above Lesson</b> (In order to monitor student learning and engagement)
Sharing students’ successes and “new” conducts and behaviors developed in this lesson.
<b>Evaluation Questions</b> After-teaching questions about effectiveness of the lesson related to the learning goals
Did the students remember the names and correctly label the 5 brain systems emphasized in this unit? Did the students use the PRESCRIPTIONS provided in the Supplementary Material to select 5 additional conducts that help them achieve success at school?
Broader after-the-lesson reflections

# Supplemental Material for Lesson # 3

## The Basal Ganglia

### FUNCTIONS:

1. Integrates feeling and movement
2. Shifts and smoothes fine motor behavior
3. suppresses unwanted motor behavior
4. sets the body's idle speed or anxiety level
5. enhances motivation
6. mediates pleasure / ecstasy

WHERE: The basal ganglia are a set of large structures towards the center of the brain that surround the deep limbic system.

The smooth integration of feelings, thoughts, and movement occurs in the basal ganglia. This is why you jump when you are excited, tremble when you are nervous, freeze when you are scared, or get tongue-tied when the boss is chewing you out. When the basal ganglia are overactive —extreme anxiety—people are more likely to be overwhelmed by stressful situations and have a tendency to freeze or become immobile (in thoughts or actions).

Over-active basal ganglia are often associated with anxiety, tension, increased awareness and heightened fear. Under-active basal ganglia can cause problems with motivation, energy, and get-up-and-go.

Shifting and smoothing fine motor behavior is another basal ganglia function and is essential to handwriting and motor coordination.

PROBLEMS with the Basal Ganglia System:

1. Anxiety, nervousness
2. Panic attacks
3. Physical sensation of anxiety
4. Tendency to predict the worst
5. Conflict avoidance
6. Muscle tension, soreness
7. Tremors
8. Fine motor problems
9. headaches
10. Low / excessive motivation
11. Tourette's syndrome/tics

PRESCRIPTIONS:

1. *Kill The Fortune-Telling ANT's*

STEP 1 – Write down the event that is causing anxiety.

STEP 2 – Notice and write down the automatic thoughts that come into your mind. Probably your thoughts are predicting a negative outcome to a situation.

STEP 3 – Label or identify the thought as a fortune-telling ANT.

STEP 4 – Talk back to the automatic negative thought and “KILL THE ANT.”

Do NOT accept every thought that comes into your mind.

Thoughts are just thoughts, not FACTS.

You do NOT have to believe every thought that comes into your mind.

YOU CAN LEARN TO CHANGE THIS [ATTEND AND HELP YOUR BASAL GANGLIA COOL DOWN BY PREDICTING THE BEST THINGS!!!!]

2. *Use Guided Imagery*

Instructions:

Find a quiet place where you can go and be alone for 20-30 minutes every day.

Sit in a comfortable chair (do NOT fall asleep!)

In your mind's eyes, imagine: “If you could go anywhere in the world to feel relaxed and content, where would you go?”

Imagine your special place with all of your senses – see what you want to see, hear the sounds you would love to hear, smell and taste all the fragrances and tastes in the air, and feel what you want to feel.

Breath slowly, calmly, deeply.

Enjoy your mini-vacation!!!!

### 3. Try Diaphragmatic Breathing

Breath slowly and deeply, mostly with your belly. Learn to breath properly:

- a. Sit in a chair.
- b. Get comfortable.
- c. Close your eyes.
- d. Put one hand on your chest and one hand on your belly.
- e. For several minutes, feel the rhythm of your breathing – Do you breath mostly with your chest? Mostly with your belly? Or with both your chest and your belly?
- f. Breath slowly and deeply, mostly with your BELLY!!!!
- g. Shifting the center of breathing lower in your body will help you feel more relaxed and in better control of yourself.

Kill the fortune-telling ANT's.

Distract yourself from anxiety.

### 4. Try Meditation

Relax, relax, relax for a few minutes or a period of time each day.

Breath – slow, deep breaths

Focus on ONE word, an idea, ideal or feeling state.

If other thoughts distract you, refocus your mind again on the chosen word.

Choose a heaven – a place where you feel comfortable, a place that you can imagine with all your senses.

Stay focused until you can imagine yourself engulfed in your idea, ideal or feeling state.

BEGIN TO EXPERIENCE YOURSELF AS YOU WANT TO BE. For example, if you want to be more relaxed, see yourself in a calm state, imagining it with all your senses. See yourself relaxed, Interact with others in a positive, relaxed way. Feel your muscles relax. Experience the relaxation. Make it real in your imagination, thereby beginning to make it real in your life.

### 5. Think About The “18/40/60” Rule

People often spend their days worrying about what other people think of them. The “18/40/60” Rule helps them understand:

When one is eighteen, a person worries about what everybody is thinking of them; when one turns forty, people do not care about what anybody thinks of them; by the age of sixty, people realize that nobody has been thinking about them at all!!!

Each person spends his/her days worrying and thinking about themselves, not anyone else; Think then,

What do you have to do today?

What do you want to do today?

Who are you going to be with today?

What responsibilities do you have to attend to today?

People think about themselves, NOT YOU!!!

You need to base your thoughts and the decisions you make **on your goals!!!**

STOP WORRYING about what others think of you!!!

#### 6. Learn How To Deal With Conflict

Whenever we give in to the temper tantrums of a child or allow someone to bully or control us, we feel terrible about ourselves. In many ways we teach other people how to treat us by what we tolerate and what we refuse to tolerate. In order to have any personal power in a relationship, we must be willing to stand up to ourselves and for what we know is right: THERE ARE RATIONAL AND KIND WAYS TO BE FIRM. BUT FIRMNESS IS ESSENTIAL. So. . . .

- a. Do NOT give in to the anger of others just because it makes you uncomfortable.
- b. Do NOT allow the opinions of others to control how you feel about yourself. Your opinion, WITHIN REASON, needs to be the one that counts.
- c. Say what you mean and stick up for what you believe is right.
- d. Maintain self-control.
- e. Be kind, if possible, but above all be firm in your stance.
- f. When we assert ourselves in a firm YET KIND WAY, others have more respect for us.

#### 7. Watch Your Basal Ganglia Nutrition

Remember, what you eat has AN IMPORTANT EFFECT ON HOW YOU FEEL!!!

If you feel anxious and over-active, it is better to have a balanced diet that does not allow you to feel hungry during the day. If you have low activity and low motivation, you may need a high-protein, low-carbohydrate diet to give yourself more energy during the day.

It is helpful to eliminate caffeine.

Eliminating alcohol is often a good idea.

Herbal preparations such as kava extract and valerian root seem to have a calming effect. The B vitamins are also helpful.

The scent from essential oils of chamomile and lavender seem to be calming.

<b>Lesson No.</b>	4	<b>Title</b>	How can the Pre-frontal Cortex help a student make successful personal decisions?
<b>Goals of Lesson</b>	Students will master where the brain’s Pre-frontal Cortex is located, what does it control and how to influence it to make successful personal decisions.		
<b>Student “thinking-pulling” Questions for the Lesson</b>	What does the teacher, Dr. Carmen Sánchez Sadek mean when she says: (1) “You are out of control!!!!!!” and why Dr. Sadek says: “Out of this class!!!!!!”		

Time per step (Best estimate)	Student activities at each step (What the students are doing)	Anticipated student response ▪ Student response ▪ Questions & Misconceptions ▪ Errors at each step	Teacher’s support of student learning and Points to remember (Including planned teacher responses to “Anticipateds”)	Materials and resources needed for each step
Intro-1 hr.	<b>Ss review the vocabulary and 5 brain systems emphasized in this unit by sharing how some of their “new” behaviors and conducts may be working to help them achieve success at school or in their lives. Ss name the 5 brain systems.</b>	Conceptualizing the brain and its parts and systems.	English and Science or Health teachers need to co-operate in teaching this unit and about the brain.	<b>Same as for Lessons 1, 2, and 3 Additional brain research reports submitted by Ss.</b>
Develop-1 hr.	<b>Writing the One-Page-Miracle (OPM) presented in the Supplementary Material for this lesson.  Ss save and keep and share with their</b>	Ss may have difficulty defining their GOALS for each of the headings in the OPM.  T. will translate	T. may model how she would fill out her teaching and Ss’s. learning GOALS for her OPM	<b>See below – Supplementary Material for this lesson.</b>

	<p><b>families their OPM's.</b></p> <p><b>Ss focus on what they like a lot about their school, their classes, and their lives as students by preparing a list.</b></p> <p><b>Ss recognize areas they have achieved and may “need to achieve and master” regarding their organizational skills.</b></p>	<p>Supplementary Material for all lessons into Spanish.</p> <p>T. helps Ss keep this list for another future assignment concerning Thanksgiving.</p> <p>Ss recognize organizational tasks they may need to improve on, especially in class.</p>		
Conclude - 1 hr.	<p><b>Ss determine where they will save and post their OPM's and how often they will up-date and review their OPM's</b></p>	<p>Parents may be involved in this part of the lesson helping students with their OPM's.</p>		<p><b>ELMO – Review of Supplementary Material for all lessons.</b></p>

<b>Mid-unit Assessment(s) Embedded in above Lesson</b> (In order to monitor student learning and engagement)	
<b>Sharing One-Page-Miracle's</b>	
<b>Evaluation Questions</b>	
After-teaching questions about effectiveness of the lesson related to the learning goals	
Did the students perform willingly all tasks required in this lesson?	
Broader after-the-lesson reflections	

# Supplemental Material for Lesson # 4

## The Pre-Frontal Cortex

### FUNCTIONS:

1. Attention span
2. Perseverance
3. Judgment
4. Impulse control
5. Organization
6. Self-monitoring and supervision
7. Problem solving
8. Critical thinking
9. Forward thinking
10. Learning from experience
11. Ability to feel and express emotions
12. Interaction with the Limbic System
13. Empathy

### WHERE:

The pre-frontal cortex (pfc) is the most evolved part of the brain. It occupies the front third of the brain, underneath the forehead.

Overall, the pfc is the part of the brain that watches, supervises, guides, directs, and focuses your behavior. It governs abilities such as time management, judgment, impulse control, planning, organization, and critical thinking. Our ability as a species to think, plan ahead, use time wisely, and communicate with others is heavily influenced by this part of the brain. The pfc is responsible for behaviors that are necessary for you to be goal-directed, socially responsible, and effective.

The pfc helps you say or do BEFORE you say or do it.

The pfc helps you problem-solve, see ahead of a situation, and, through experience, choose among helpful alternatives.

The pfc helps you learn from mistakes.

The pfc is also involved with sustaining attention span AND ATTENTION SPAN IS REQUIRED FOR SHORT-TERM MEMORY AND LEARNING.

The pfc helps you keep-on-task and decreases the distracting input from other brain areas.

The pfc allows you to feel and express emotions through words.

Thoughtfulness and impulse control are heavily influenced by the pfc.

The ability to think through the consequences of behavior IS ESSENTIAL TO EFFECTIVE LIVING. Without proper pfc function, it is difficult to act in consistent and thoughtful ways, and impulse can take over.

### PROBLEMS With The Pre-Frontal Cortex

1. Short attention span
2. Distractibility
3. Lack of Perseverance
4. Impulse control problems
5. Hyperactivity
6. Chronic lateness, poor time management
7. Disorganization
8. Procrastination
9. Unavailability of emotions
10. Misperceptions
11. Poor judgment
12. Trouble learning from experience
13. Short-term memory problems
14. Social and TEST anxiety

### PRESCRIPTIONS:

1. *Develop And Maintain Clear Focus (The One-Page Miracle)*

When we know what we want, we are more likely to change our behavior to get it. BEING GOAL-DIRECTED helps keep our behavior on track. Goal setting is NOT for some far-off dream. It is for NOW, and it is very specific. MAKING GOALS THAT YOU CAN FOCUS ON DAILY WILL MAKE A BIG DIFFERENCE IN YOUR LIFE.

The One-Page Miracle (OPM):

Successful children and adults have a SENSE OF RESPONSIBILITY AND CLEAR GOALS.

HEADINGS:	<u>Studying</u>	<u>Work</u>	<u>Friendships</u>	<u>Money</u>	<u>MYSELF</u>
GOALS:					
Current:					BODY
					MIND
Future:					SPIRIT
					INTERESTS

Include GOALS for:

Current and future Studying plans.

Current and future Work plans.

Your relationships with members of your extended FAMILY and FRIENDS.

Current and future financial (Money) plans.

Plans you have for your BODY, MIND, SPIRIT and INTERESTS.

Clearly write out what is important to you in each area named above. Write what you want, NOT what you do NOT want. Be POSITIVE and write using "I." Up-date your first draft frequently. PLACE this chart where you can see it every day so you can focus your eyes every day on what is important to you every day. This makes it easier to SUPERVISE YOUR OWN BEHAVIOR and to match your behavior to get what you want. Your life will become more conscious and you will spend your energies on goals that are important to you.

## 2. Focus On What You Like A Lot

What we attend to and focus on has a very significant impact on how we feel and act day to day. Focusing on what you like about your life and on what you like about others is a powerful way to keep your pre-frontal cortex healthy.

It is often necessary to have something that reminds us of this prescription: TO NOTICE THE GOOD THINGS ABOUT THE PEOPLE AND THE THINGS and HAPPENINGS in our lives.

3. Have Meaning, Purpose, Stimulation, And Excitement In Your Life!

4. Get Organized; Get Help When You Need It!

- a. Set clear goals for yourself (See # 1).
- b. Then ask yourself every day: "Is my behavior getting me what I want?"
- c. Manage your time in a way that is consistent with the goals you have in your life.
- d. Devote some time each day to organization.
- e. Prioritize your projects.
- f. Make deadlines for yourself.
- g. Keep TO-DO Lists and revise them regularly.
- h. Keep an agenda or planning book.
- i. Break-down overwhelming tasks into smaller tasks. "A journey of a thousand miles begins with one step."
- j. Do unpleasant tasks first.

5. DO NOT BE Another Person's Stimulant.

Unfortunately, many persons with pre-frontal cortex problems tend to be conflict-seeking to stimulate their brains. Those around them need to be quiet, calm and steady while dealing with the person who has a tendency towards conflict-seeking behavior. ONLY WHEN THINGS are CALM can the conflict-seeking person be helped.

6. Watch Your Pre-Frontal Cortex Nutrition!

7. Try MOZART For Focus!!!

<b>Lesson No.</b>	5	<b>Title</b>	How can the Cingulate help a student make successful personal decisions?
<b>Goals of Lesson</b>	Students will master where the brain’s Cingulate is located, what does it control and how to influence it to make successful personal decisions.		
<b>Student “thinking-pulling” Questions for the Lesson</b>	What does the teacher, Dr. Carmen Sánchez Sadek mean when she says: “You are out of control!! Stop doing that!!!!!” to students who many times do not realize what they are doing!!!!!!		

<b>Time per step (Best estimate)</b>	<b>Student activities at each step (What the students are doing)</b>	<b>Anticipated</b> ▪ <b>Student response</b> ▪ <b>Questions &amp; Misconceptions</b> ▪ <b>Errors at each step</b>	<b>Teacher’s support of student learning and Points to remember</b> (Including planned teacher responses to “Anticipateds”)	<b>Materials and resources needed for each step</b>
Intro-1 hr.	<p><b>Ss review vocabulary and share where they have posted their OPM’s and whether they have already checked their GOALS for the day and for their lives. Do Ss know what they need to do on this day to help themselves achieve success with their personal decisions for this day?</b></p> <p><b>Ss share ‘what they like a lot about’ their school, classes and own lives as a means to continue to emphasize</b></p>	<p>Conceptualizing and locating the Cingulate in the brain.</p> <p>Understanding obsessions and compulsions (in their own way of behaving)</p> <p>Involving Parents at</p>	<p>This is another difficult lesson including many concepts that may need to be introduced, explained, and reinforced in Science classes taught cooperatively with English classes</p>	<p><b>Same as for Lessons 1, 2, 3, and 4. Additional brain research reports submitted by Ss.</b></p> <p><b>See below – Supplementary Material for Lesson 4</b></p>

	<b>POSITIVE thinking and behavior.</b>  <b>Ss share ways they have ‘improved’ their organizational skills</b>	this point in this lesson as a means of support for “new” Ss’s conducts and behaviors		
Develop-1 hr.	<b>Using Supplementary Material for this lesson, Ss list PRESCRIPTIONS for a healthy Cingulate.</b>	This lesson may need additional time especially as Ss try to identify their own obsessive and compulsive conducts and behaviors	Additional Internet research on the Cingulate System in class and through individual attendance to the PDC.	<b>ELMO – Supplementary Material for this lesson.</b>
Conclude - 1 hr.	<b>Ss write a ‘personal’ (not to be shared) list of at least 3 of their own compulsive and obsessive class behaviors and at least 2 of their compulsive and obsessive home behaviors that they hope to change following the PRESCRIPTIONS for the Cingulate studied in this lesson.</b>	Parents may be involved in this lesson by having their Ss share their lists and their plans to change their behaviors.		<b>ELMO – Review of Supplementary Material for all lessons as needed.</b>

**Mid-unit Assessment(s) Embedded in above Lesson** (In order to monitor student learning and engagement)

If Ss so desire, they may share with a real friend their ‘personal’ lists and have the partner help Ss identify their class behaviors that show compulsive or obsessive tendencies.

**Evaluation Questions**

After-teaching questions about effectiveness of the lesson related to the learning goals

Did the students perform willingly and with enthusiasm the tasks required in this lesson?

Did the students begin to understand how they can control their brains by expressing how they themselves are changing their own behaviors?

Did the teacher notice a great reduction in the times she has to admonish students during class time? Teacher may wish to keep records of which students need admonishment and how often to document if the admonished students' behaviors are under their own purposeful control.

Broader after-the-lesson reflections

# Supplemental Material for Lesson #5

## The Cingulate System

### FUNCTIONS:

1. Ability to shift attention.
2. Cognitive flexibility.
3. Adaptability.
4. Movement from idea to idea.
5. Ability to see options.
6. Ability to “go with the flow.”
7. Ability to cooperate.

WHERE: Traversing longitudinally through the central deep aspects of the frontal lobes is the cingulated gyrus. It is the part of the brain that allows you to shift your attention from one thing to another, to move from idea to idea, to see options, to feel safety and security.

The cingulate system is the part of the brain associated with “cognitive flexibility,” which is the ability to go with the flow, to adapt to change, to deal successfully with new problems, and to effectively manage change and transitions. Cooperation is also influenced by this part of the brain, as well as “future-oriented thinking,” such as planning and goal setting.

### PROBLEMS With The Cingulate System:

1. Worrying
2. Holding on to hurts from the past
3. Getting stuck on thoughts (Obsessions)
4. Getting stuck on behaviors (Compulsions)
5. Oppositional behavior
6. Argumentativeness

7. Uncooperativeness; tendency to say NO automatically
8. Addictive behavior (alcohol and drug abuse, eating disorders)
9. Chronic panic
10. Cognitive inflexibility
11. Obsessive-compulsive disorder
12. Eating disorders
13. Road Rage

The cingulate system of the brain allows us to shift our attention from thing to thing, idea to idea, issue to issue. When the cingulate system is dysfunctional, we have tendency to get locked into negative thoughts or behaviors; we have trouble seeing the options in situations. Healing this part of the mind involves training the mind to see options and new ideas.

#### PRESCRIPTIONS:

1. *Notice When You Are Stuck, Distract Yourself, And Come Back To The Problem Later!!*

Whenever you find your thoughts cycling, going over and over, distract yourself FROM THEM: Get up and do something else. Distraction is often a very helpful technique:

- a. Sing your favorite song.
- b. Listen to music that makes you feel POSITIVE.
- c. Take a walk.
- d. Do a different chore.
- e. Play with a pet.
- f. Do structure meditation.
- g. Focus on a word and do NOT allow any other thoughts to enter your mind (Imagine a broom that sweeps out all other thoughts).

2. *Think Through Answers BEFORE Automatically Saying NO!*

It is helpful to take a deep breath, hold it for three seconds, and then take five seconds to exhale, just to get extra time before responding.

3. *Write Your Options And Solutions When You Feel Stuck*

Write out the thought that you are stuck on.

Make a list of the things you can do about the worry.

Make a list of the things you can NOT do about the worry.

4. *Seek The Counsel Of Others When You Feel Stuck*
5. *Memorize Or Recite A Calming Poem Or Prayer When Bothered By Repetitive Thoughts*
6. *Take A Break And Come Back Later*
7. *Try Nutritional Interventions and Exercise!!!*

<b>Lesson No.</b>	6	<b>Title</b>	How can the Temporal Lobes help a student make successful personal decisions?
<b>Goals of Lesson</b>	Students will master where the brain's Temporal Lobes are located, what they control and how to influence them to make successful personal decisions.		
<b>Student "thinking-pulling" Questions for the Lesson</b>	Would there be a time in the very near future when I, the teacher, Dr. Carmen Sánchez Sadek, will never ever have to say: "You are out of control!!!!" Or "Stop doing that!!!!" Or "Out of this class!!!!"?		

<b>Time per step (Best estimate)</b>	<b>Student activities at each step (What the students are doing)</b>	<b>Anticipated</b> ▪ <b>Student response</b> ▪ <b>Questions &amp; Misconceptions</b> ▪ <b>Errors at each step</b>	<b>Teacher's support of student learning and Points to remember</b> (Including planned teacher responses to "Anticipateds")	<b>Materials and resources needed for each step</b>
Intro- 1 hr.	<b>Ss review the "pulling question" posed by the T. Ss review their "new" conducts and behaviors and may wish to share how they are becoming more aware of their own "new" conducts and behaviors and how and possibly why.</b>  <b>Vocabulary review and introduction of Temporal Lobes.</b>	Ss may be realizing how they CAN and DO influence their own behavior. Personal anecdotes or personal effort should be lavishly recognized by T.	This last lesson on the 5 brain systems or parts is quite complex since it involves two similar brain parts with distinctive functions.  Co-operative teaching with science or Health T.'s highly recommended.	<b>Same as for Lessons 1, 2, 3, 4, and 5.</b>  <b>Additional brain research reports submitted by Ss.</b>  <b>ELMO – Review of Supplementary Material, Lessons 1-5, as needed</b>
Develop- 1 hr.	<b>Using Supplementary Material for this lesson, Ss list PRESCRIPTIONS for healthy Temporal Lobes.</b>	This rather difficult lesson may need additional time as Ss try to understand the many complex		<b>ELMO – Supplementary Material for this lesson.</b>

		functions of the Temporal Lobes.		
Conclude - 1 hr.	<p><b>Ss create a “Library of Personal Wonderful Experiences” by listing their most wonderful memories.</b></p> <p><b>Ss list their favorite songs and model singing, chanting, yodeling, humming, reciting poetry, and “toning” and toning sounds (<i>Ah, ou, ee, ay, oh, om</i>)</b></p>	<p>Ss may share pictures or drawing of their most favorite wonderful experience.</p> <p>Modeling sounds or listening to famous songs or cultural expressions with these sounds.</p>		<p><b>ELMO – Review of Supplementary Material for this lesson.</b></p> <p><b>Internet: recordings of the sounds indicated, especially “toning.”</b></p>

**Mid-unit Assessment(s) Embedded in above Lesson** (In order to monitor student learning and engagement)

Sharing favorite songs, favorite chants, favorite poetry, and mastering or listening to “toning.”

**Evaluation Questions**

After-teaching questions about effectiveness of the lesson related to the learning goals

Did the students find many common favorite songs, chants, poems, expressions of toning?

Did the students participate in an orderly fashion during this lesson or was their conduct and behavior “out of control”?

Did the students choose a “class” song or poem to recite frequently as a means of influence the Temporal Lobes?

Broader after-the-lesson reflections

# Supplemental Material for Lesson # 6

## The Temporal Lobes

### FUNCTIONS:

#### Dominant Side (usually the left)

1. Understanding and processing language
2. Intermediate-Term Memory
3. Long-Term Memory
4. Auditory Learning
5. Retrieval of words
6. Complex memories
7. Visual and auditory processing
8. Emotional stability

#### Non-dominant Side (usually the right)

1. Recognizing facial expressions
2. Decoding vocal intonation
3. Rhythm
4. Music
5. Visual learning

WHERE: The temporal lobes, on either side of the brain behind the eyes and underneath the temples, make rich contributions to who we are and how we experience life. Since the temporal lobes sit in a cavity surrounded by bone on five sides (front, back, right side, left side, and underside) they can be damaged by a blow to the head from almost any angle.

The temporal lobes store the memories and images and help us define our sense of ourselves. The most precious treasures we have in life are the images we store in the memory banks of our brains. The sum of these stored experiences is responsible for our sense of personal identity and our sense of connectedness to those around us.

Memories can sabotage our chances for success and effectiveness. The ability to consistently feel stable and POSITIVE, despite the ups and downs of every day life, is important for the development and maintenance of consistent character and personality.

PROBLEMS With The Dominant (Usually Left) Temporal Lobe:

1. Aggression, internally or externally directed.
2. Dark of violent thoughts.
3. Sensitivity to slights; mild paranoia
4. Word-finding problems
5. Auditory processing problems
6. Reading difficulties
7. Emotional instability

PROBLEMS With The Non-Dominant (Usually Right) Temporal Lobe:

1. Difficulty recognizing facial expression
2. Difficulty decoding vocal intonation
3. Implicated in social-skills struggles.

PROBLEMS With Either Or Both Temporal Lobes:

1. Memory problems; amnesia
2. Headaches or abdominal pain without a clear explanation
3. Anxiety or fear for no particular reason
4. Abnormal sensory perceptions, visual or auditory distortions
5. Feelings of “déjà vu” or “jamais vu.”
6. Periods of spaciness or confusion
7. Religious or moral preoccupation
8. Hyper-graphia, excessive writing
9. Seizures

PRESCRIPTIONS:

The following prescriptions are geared toward optimizing and healing the temporal lobes:

1. CREATE A LIBRARY OF WONDERFUL EXPERIENCES

Strive for a series of experiences that keep you motivated, healthy and excited about your life. Record memorable experiences of your life with pictures, videos, dairy entries, etc. Re-experience your memories whenever you can.

2. Sing Whenever /Wherever You Can

3. Use Humming And Toning To Tune Up Your Brain

4. Listen To Classical Music

5. Learn To Play A Musical Instrument

6. Move In Rhythms

7. Get Enough Sleep

8. Eliminate Caffeine and Nicotine

9. Watch Your Nutrition

<b>Goals of Lesson</b>	Students will identify brain-based prescriptions to optimize brain effectiveness: <ol style="list-style-type: none"> <li>1. Behavioral Prescriptions</li> <li>2. Cognitive Prescriptions</li> <li>3. Nutritional Prescriptions</li> </ol>
<b>Student “thinking-pulling” Questions for the Lesson</b>	How are you going to do “differently” what you usually do and what can you do to “change”?

<b>Time per step (Best estimate)</b>	<b>Student activities at each step (What the students are doing)</b>	<b>Anticipated Student response Questions &amp; Misconceptions Errors at each step</b>	<b>Teacher’s support of student learning and Points to remember (Including planned teacher responses to “Anticipateds”)</b>	<b>Materials and resources needed for each step</b>
Intro- 1 hr.	<b>Review PRESCRIPTIONS for 5 brain systems studies in previous 6 lessons.</b> <b>Vocabulary review.</b>	Ss should have a precise active vocabulary of the 5 brain parts or systems studies in the previous lessons	Visuals may help remind Ss of the brain parts and systems.	<b>Supplementary Material for all previous lessons, summarized in this lesson</b>
Develop- 1 hr.	<b>Ss list how they are going to do “differently” what they usually do in class (and in their personal lives, if possible).</b>	Ss may work in pairs or small groups.  A class list may be compiled from Ss’s contributions.		
Conclude - 1 hr.	<b>Ss list at least 3 of their own (secret?) changes in conduct and behaviors.</b> <b>Sharing on a voluntary basis.</b>	Parent involvement may be highly recommended.	Ss may work individually or with a “best friend” with whom they may be willing to share.	<b>Supplementary material for all previous lessons.</b>

**Mid-unit Assessment(s) Embedded in above Lesson** (In order to monitor student learning and engagement)

Students participate in developing / compiling a “class” list of “changed behaviors or conducts.

**Evaluation Questions**

After-teaching questions about effectiveness of the lesson related to the learning goals

Did the students express confidence in the fact that they can change their own conduct and behaviors? (Did the students ...? )

Broader after-the-lesson reflections

# Supplemental Material for Lesson # 7

## **The Deep Limbic System:**

### FUNCTIONS:

10. Sets the emotional tone of the mind
11. filters external events through internal states (creates emotional coloring)
12. tags events as internally important
13. stores highly charged emotional memories
14. modulates motivation
15. control appetite and sleep cycles
16. promotes bonding
17. directly processes the sense of smell
18. modulates libido

**WHERE:** The deep limbic system lies near the center of the brain. Considering its size—about that of a walnut—it is power-packed with functions, all of which are critical for human behavior and survival.

In this definition, the deep limbic system includes the thalamic structures, and hypothalamus, along with the immediate surrounding structures. All of these systems are complex and interconnected. From an evolutionary standpoint, this is an “older” part of the mammalian brain that enabled animals to experience and express emotions: one must have passion, emotion, and the desire to make something happen and the deep limbic system adds the emotional spice, in both positive and negative ways.

When the deep limbic system is LESS active, there is generally a positive, more hopeful state of mind. When it is heated up, or overactive, negativity can take over.

The deep limbic system, along with the deep temporal lobes, has been reported to be involved in STORING highly charged emotional memories, both positive and negative. The total experience of our emotional memories is responsible, IN PART, for the emotional tone of our mind.

The deep limbic system also affects motivation and drive. It helps get you going in the morning and encourages you to move throughout the day. Over-activity is associated with lowered motivation and drive. The hypothalamus controls the sleep and appetite cycles in the body. Healthy sleep and appetite are essential in maintaining a proper internal milieu.

The deep limbic structures are also intimately involved in bonding and social connectedness. The deep limbic system affects the bonding mechanism that enables a person to connect socially with other people; one's ability to do this successfully in turn influences one's mood.

The deep limbic system also directly processes the sense of smell. Small can thus have a powerful impact on our feeling states.

PROBLEMS in the Deep Limbic System:

9. moodiness, irritability, clinical depression
10. increased negative thinking
11. negative perception of events
12. decreased motivation
13. flood of negative emotions
14. appetite and sleep problems
15. decreased or increased sexual responsiveness
16. social isolation

PRESCRIPTIONS:

11. *Kill The ANT's (Automatic Negative Thoughts)*

STEP 1 – Realize that your thoughts are real.

STEP 2 – Notice how negative thoughts affect your body.

STEP 3 – Notice how positive thoughts affect your body.

STEP 4 – Notice how your body reacts to every thought you have.

STEP 5 – Think of bad thoughts as pollution.

STEP 6 – Understand that your automatic thoughts do not always tell the truth.

STEP 7 – Talk back to ANT's.

STEP 8 – Exterminate the ANT's.

TYPES of ANT's:

- J. "Always/Never" thinking – (Also: no one, everyone, every time, everything, etc.)
- K. Focusing on the negative – Seeing only the bad in a situation.
- L. Fortune telling – Predicting the worst possible outcome to a situation.

- M. Mind reading – Believing that you know what others are thinking, even though they have not told you.
- N. Thinking with your feelings – Believing negative feelings without ever questioning them. “I feel . . .” Look for the evidence behind the feeling.
- O. Guilt beating – Thinking in words like: “I ought to . . .” (should, must, have to, etc.)
- P. Labeling – attaching a negative label to yourself or to someone else.
- Q. Personalizing – What others do is a reflection on me.
- R. Blaming – blaming others for own problems.

12. Kill The ANT's / FEED YOUR ANTEATER

- \* Your thoughts really matter.
- \* They can either help you or hurt your deep limbic system.
- \* Whenever you notice ANT's, you need to crush them or they will affect you.
- \* If you can catch ANT's at the moment they occur and correct them, you take AWAY THE POWER ANT's HAVE OVER YOU!!!
- \* Most negative thinking is automatic and goes unnoticed. YOU ARE NOT REALLY CHOOSING HOW TO RESPOND TO YOUR SITUATION, IT IS BEING CHOSEN FOR YOU BY BAD BRAIN HABITS.
- \* Do NOT believe everything you hear—even in your own mind!!!
- \* Whenever you notice an ANT entering your mind, talk back to the ANT and you begin to take away their power and gain control over your moods.
- \* KILL THE ANT's BY FEEDING YOUR EMOTIONAL ANTEATER.

13. Surround Yourself With People Who Provide Positive Bonding

14. Protect Your Children With Limbic Bonding

- a. Spend 20 minutes a day with your child doing something that he or she would like to do.
- b. During this special time there are to be no parental commands, no questions and no directions.
- c. Notice as many positive behaviors on the part of the child as you can.
- d. Do much more listening than talking.

15. Build People Skills to Enhance Limbic Bonds

- a. How you get along with other people can either help or hurt your limbic system.
- b. The better you get along with those around you, the better you will feel!!!
- c. Take responsibility for keeping relationships strong. Do NOT blame others for relationship problems.

- d. Look for what you can do to improve relationships.
- e. Focusing on what you want in a relationship is essential to making it happen.
- f. Protect your relationships by building up the other person. NEVER discount, belittle or degrade the other person.
- g. ALWAYS assume the BEST about the other person. This will help his or her behavior to be more positive.
- h. Keep relationships “fresh.”
- i. Notice the GOOD. It takes real effort to notice what you like. When you spend more time noticing the positive, you are more likely to see an increase in positive behavior.
- j. Communicate clearly. Take time to really listen and understand. Do NOT react to what you think others mean. ASK what others mean.
- k. Maintain and protect TRUST.
- l. Deal with difficult issues: In a firm but kind way, stick for what you think is right. It will keep the relationship balanced.
- m. Make time for your relationships. Making your special relationship a “time investment” will pay dividends for years to come.

16. Recognize The Importance Of Physical Contact

17. Surround Yourself With Great Smells

18. Build A Library Of Wonderful Memories

19. Try Physical Exercise

20. Watch Your Limbic Nutrition

## **The Basal Ganglia**

### FUNCTIONS:

1. Integrates feeling and movement
2. Shifts and smoothes fine motor behavior

3. suppresses unwanted motor behavior
4. sets the body's idle speed or anxiety level
5. enhances motivation
6. mediates pleasure / ecstasy

WHERE: The basal ganglia are a set of large structures towards the center of the brain that surround the deep limbic system.

The smooth integration of feelings, thoughts, and movement occurs in the basal ganglia. This is why you jump when you are excited, tremble when you are nervous, freeze when you are scared, or get tongue-tied when the boss is chewing you out. When the basal ganglia are overactive—extreme anxiety—people are more likely to be overwhelmed by stressful situations and have a tendency to freeze or become immobile (in thoughts or actions).

Over-active basal ganglia are often associated with anxiety, tension, increased awareness and heightened fear. Under-active basal ganglia can cause problems with motivation, energy, and get-up-and-go.

Shifting and smoothing fine motor behavior is another basal ganglia function and is essential to handwriting and motor coordination.

PROBLEMS with the Basal Ganglia System:

12. Anxiety, nervousness
13. Panic attacks
14. Physical sensation of anxiety
15. Tendency to predict the worst
16. Conflict avoidance
17. Muscle tension, soreness
18. Tremors
19. Fine motor problems
20. headaches
21. Low / excessive motivation
22. Tourette's syndrome/tics

PRESCRIPTIONS:

8. *Kill The Fortune-Telling ANT's*

STEP 1 – Write down the event that is causing anxiety.

STEP 2 – Notice and write down the automatic thoughts that come into your mind. Probably your thoughts are predicting a negative outcome to a situation.

STEP 3 – Label or identify the thought as a fortune-telling ANT.

STEP 4 – Talk back to the automatic negative thought and “KILL THE ANT.”

Do NOT accept every thought that comes into your mind.

Thoughts are just thoughts, not FACTS.

You do NOT have to believe every thought that comes into your mind.

YOU CAN LEARN TO CHANGE THIS [ATTEND AND HELP YOUR BASAL GANGLIA COOL DOWN BY PREDICTING THE BEST THINGS!!!!]

#### 9. Use Guided Imagery

Instructions:

Find a quiet place where you can go and be alone for 20-30 minutes every day.

Sit in a comfortable chair (do NOT fall asleep!)

In your mind’s eyes, imagine: “If you could go anywhere in the world to feel relaxed and content, where would you go?”

Imagine your special place with all of your senses – see what you want to see, hear the sounds you would love to hear, smell and taste all the fragrances and tastes in the air, and feel what you want to feel.

Breathe slowly, calmly, deeply.

Enjoy your mini-vacation!!!!

#### 10. Try Diaphragmatic Breathing

Breathe slowly and deeply, mostly with your belly. Learn to breathe properly:

h. Sit in a chair.

i. Get comfortable.

j. Close your eyes.

k. Put one hand on your chest and one hand on your belly.

l. For several minutes, feel the rhythm of your breathing – Do you breathe mostly with your chest? Mostly with your belly? Or with both your chest and your belly?

m. Breathe slowly and deeply, mostly with your BELLY!!!!

n. Shifting the center of breathing lower in your body will help you feel more relaxed and in better control of yourself.

Kill the fortune-telling ANT’s.

Distract yourself from anxiety.

#### 11. Try Meditation

Relax, relax, relax for a few minutes or a period of time each day.

Breath – slow, deep breaths

Focus on ONE word, an idea, ideal or feeling state.

If other thoughts distract you, refocus your mind again on the chosen word.

Choose a heaven – a place where you feel comfortable, a place that you can imagine with all your senses.

Stay focused until you can imagine yourself engulfed in your idea, ideal or feeling state.

BEGIN TO EXPERIENCE YOURSELF AS YOU WANT TO BE. For example, if you want to be more relaxed, see yourself in a calm state, imagining it with all your senses. See yourself relaxed, Interact with others in a positive, relaxed way. Feel your muscles relax. Experience the relaxation. Make it real in your imagination, thereby beginning to make it real in your life.

### 12. Think About The “18/40/60” Rule

People often spend their days worrying about what other people think of them. The “18/40/60” Rule helps them understand:

When one is eighteen, a person worries about what everybody is thinking of them; when one turns forty, people do not care about what anybody thinks of them; by the age of sixty, people realize that nobody has been thinking about them at all!!!

Each person spends his/her days worrying and thinking about themselves, not anyone else; Think then,

What do you have to do today?

What do you want to do today?

Who are you going to be with today?

What responsibilities do you have to attend to today?

People think about themselves, NOT YOU!!!

You need to base your thoughts and the decisions you make **on your goals!!!**

STOP WORRYING about what others think of you!!!

### 13. Learn How To Deal With Conflict

Whenever we give in to the temper tantrums of a child or allow someone to bully or control us, we feel terrible about ourselves. In many ways we teach other people how to treat us by what we tolerate and what we refuse to tolerate. In order to have any personal power in a relationship, we must be willing to stand up to ourselves and for what we know is right: THERE ARE RATIONAL AND KIND WAYS TO BE FIRM. BUT FIRMNESS IS ESSENTIAL. So. . . .

g. Do NOT give in to the anger of others just because it makes you uncomfortable.

h. Do NOT allow the opinions of others to control how you feel about yourself. Your opinion, WITHIN REASON, needs to be the one that counts.

i. Say what you mean and stick up for what you believe is right.

- j. Maintain self-control.
- k. Be kind, if possible, but above all be firm in your stance.
- l. When we assert ourselves in a firm YET KIND WAY, others have more respect for us.

#### 14. Watch Your Basal Ganglia Nutrition

Remember, what you eat has AN IMPORTANT EFFECT ON HOW YOU FEEL!!!

If you feel anxious and over-active, it is better to have a banace diet that does not allow you to feel hungry during the day. If you have low activity and low motivation, you may need a high-protein, low-carbohydrate diet to geve yourself more energy during the day.

It is helpful to eliminate caffeine.

Eliminating alcohol is often a good idea.

Herbal preparations such as kava extract and valerian root seem to have a calming effect. The B vitamins are also helpful.

The scent from essential oils of chamomile and lavender seem to be calming.

### **The Pre-Frontal Cortex**

#### FUNCTIONS:

1. Attention span
2. Perseverance
3. Judgment
4. Impulse control
5. Organization
6. Self-monitoring and supervision
7. Problem solving
8. Critical thinking
9. Forward thinking
10. Learning from experience
11. Ability to feel and express emotions
12. Interaction with the Limbic System
13. Empathy

#### WHERE:

The pre-frontal cortex (pfc) is the most evolved part of the brain. It occupies the front third of the brain, underneath the forehead.

Overall, the pfc is the part of the brain that watches, supervises, guides, directs, and focuses your behavior. It governs abilities such as time management, judgment, impulse control, planning, organization, and critical thinking. Our ability as a species to think, plan ahead, use time wisely, and communicate with others is heavily influenced by this part of the brain. The pfc is responsible for behaviors that are necessary for you to be goal-directed, socially responsible, and effective.

The pfc helps you say or do BEFORE you say or do it.

The pfc helps you problem-solve, see ahead of a situation, and, through experience, choose among helpful alternatives.

The pfc helps you learn from mistakes.

The pfc is also involved with sustaining attention span AND ATTENTION SPAN IS REQUIRED FOR SHORT-TERM MEMORY AND LEARNING.

The pfc helps you keep-on-task and decreases the distracting input from other brain areas.

The pfc allows you to feel and express emotions through words.

Thoughtfulness and impulse control are heavily influenced by the pfc.

The ability to think through the consequences of behavior IS ESSENTIAL TO EFFECTIVE LIVING. Without proper pfc function, it is difficult to act in consistent and thoughtful ways, and impulse can take over.

### PROBLEMS With The Pre-Frontal Cortex

15. Short attention span
16. Distractibility
17. Lack of Perseverance
18. Impulse control problems
19. Hyperactivity
20. Chronic lateness, poor time management
21. Disorganization
22. Procrastination
23. Unavailability of emotions
24. Misperceptions
25. Poor judgment
26. Trouble learning from experience
27. Short-term memory problems
28. Social and TEST anxiety

**PRESCRIPTIONS:**

**1. Develop And Maintain Clear Focus (The One-Page Miracle)**

When we know what we want, we are more likely to change our behavior to get it. BEING GOAL-DIRECTED helps keep our behavior on track. Goal setting is NOT for some far-off dream. It is for NOW, and it is very specific. MAKING GOALS THAT YOU CAN FOCUS ON DAILY WILL MAKE A BIG DIFFERENCE IN YOUR LIFE.

The One-Page Miracle (OPM):

Successful children and adults have a SENSE OF RESPONSIBILITY AND CLEAR GOALS.

HEADINGS:	Studying	Work	Friendships	Money	MYSELF
GOALS:					
Current:					BODY
					MIND
Future:					SPIRIT
					INTERESTS

Include GOALS for:

Current and future Studying plans.

Current and future Work plans.

Your relationships with members of your extended FAMILY and FRIENDS.

Current and future financial (Money) plans.

Plans you have for your BODY, MIND, SPIRIT and INTERESTS.

Clearly write out what is important to you in each area named above. Write what you want, NOT what you do NOT want. Be POSITIVE and write using "I." Up-date your first draft frequently. PLACE this chart where you can see it every day so you can focus your eyes every day on what is important to you every day. This makes it easier to SUPERVISE YOUR OWN BEHAVIOR and to match your behavior to get what you want. Your life will become more conscious and you will spend your energies on goals that are important to you.

**2. Focus On What You Like A Lot**

What we attend to and focus on has a very significant impact on how we feel and act day to day. Focusing on what you like about your life and on what you like about others is a powerful way to keep your pre-frontal cortex healthy.

It is often necessary to have something that reminds us of this prescription: TO NOTICE THE **GOOD** THINGS ABOUT THE PEOPLE AND THE THINGS and HAPPENINGS in our lives.

3. *Have Meaning, Purpose, Stimulation, And Excitement In Your Life!*

4. *Get Organized; Get Help When You Need It!*

- a. Set clear goals for yourself (See # 1).
- b. Then ask yourself every day: "Is my behavior getting me what I want?"
- c. Manage your time in a way that is consistent with the goals you have in your life.
- d. Devote some time each day to organization.
- e. Prioritize your projects.
- f. Make deadlines for yourself.
- g. Keep TO-DO Lists and revise them regularly.
- h. Keep an agenda or planning book.
- i. Break-down overwhelming tasks into smaller tasks. "A journey of a thousand miles begins with one step."
- j. Do unpleasant tasks first.

5. *DO NOT BE Another Person's Stimulant.*

Unfortunately, many persons with pre-frontal cortex problems tend to be conflict-seeking to stimulate their brains. Those around them need to be quiet, calm and steady while dealing with the person who has a tendency towards conflict-seeking behavior. ONLY WHEN THINGS are CALM can the conflict-seeking person be helped.

6. *Watch Your Pre-Frontal Cortex Nutrition!*

7. *Try MOZART For Focus!!!*

## **The Cingulate System**

### FUNCTIONS:

8. Ability to shift attention.
9. Cognitive flexibility.
10. Adaptability.
11. Movement from idea to idea.
12. Ability to see options.

13. Ability to “go with the flow.”
14. Ability to cooperate.

WHERE: Traversing longitudinally through the central deep aspects of the frontal lobes is the cingulated gyrus. It is the part of the brain that allows you to shift your attention from one thing to another, to move from idea to idea, to see options, to feel safety and security.

The cingulate system is the part of the brain associated with “cognitive flexibility,” which is the ability to go with the flow, to adapt to change, to deal successfully with new problems, and to effectively manage change and transitions. Cooperation is also influenced by this part of the brain, as well as “future-oriented thinking,” such as planning and goal setting.

#### PROBLEMS With The Cingulate System:

14. Worrying
15. Holding on to hurts from the past
16. Getting stuck on thoughts (Obsessions)
17. Getting stuck on behaviors (Compulsions)
18. Oppositional behavior
19. Argumentativeness
20. Uncooperativeness; tendency to say NO automatically
21. Addictive behavior (alcohol and drug abuse, eating disorders)
22. Chronic panic
23. Cognitive inflexibility
24. Obsessive-compulsive disorder
25. Eating disorders
26. Road Rage

The cingulate system of the brain allows us to shift our attention from thing to thing, idea to idea, issue to issue. When the cingulate system is dysfunctional, we have tendency to get locked into negative thoughts or behaviors; we have trouble seeing the options in situations. Healing this part of the mind involves training the mind to see options and new ideas.

#### PRESCRIPTIONS:

8. *Notice When You Are Stuck, Distract Yourself, And Come Back To The Problem Later!!*

Whenever you find your thoughts cycling, going over and over, distract yourself FROM THEM: Get up and do something else. Distraction is often a very helpful technique:

- h. Sing your favorite song.

- i. Listen to music that makes you feel POSITIVE.
- j. Take a walk.
- k. Do a different chore.
- l. Play with a pet.
- m. Do structure meditation.
- n. Focus on a word and do NOT allow any other thoughts to enter your mind (Imagine a broom that sweeps out all other thoughts).

9. Think Through Answers BEFORE Automatically Saying NO!

It is helpful to take a deep breath, hold it for three seconds, and then take five seconds to exhale, just to get extra time before responding.

10. Write Your Options And Solutions When You Feel Stuck

Write out the thought that you are stuck on.

Make a list of the things you can do about the worry.

Make a list of the things you can NOT do about the worry.

11. Seek The Counsel Of Others When You Feel Stuck

12. Memorize Or Recite A Calming Poem Or Prayer When Bothered By Repetitive Thoughts

13. Take A Break And Come Back Later

14. Try Nutritional Interventions and Exercise!!!

## The Temporal Lobes

### FUNCTIONS:

Dominant Side (usually the left)

- 9. Understanding and processing language
- 10. Intermediate-Term Memory

11. Long-Term Memory
12. Auditory Learning
13. Retrieval of words
14. Complex memories
15. Visual and auditory processing
16. Emotional stability

Non-dominant Side (usually the right)

6. Recognizing facial expressions
7. Decoding vocal intonation
8. Rhythm
9. Music
10. Visual learning

WHERE: The temporal lobes, on either side of the brain behind the eyes and underneath the temples, make rich contributions to who we are and how we experience life. Since the temporal lobes sit in a cavity surrounded by bone on five sides (front, back, right side, left side, and underside) they can be damaged by a blow to the head from almost any angle.

The temporal lobes store the memories and images and help us define our sense of ourselves. The most precious treasures we have in life are the images we store in the memory banks of our brains. The sum of these stored experiences is responsible for our sense of personal identity and our sense of connectedness to those around us. Memories can sabotage our chances for success and effectiveness. The ability to consistently feel stable and POSITIVE, despite the ups and downs of every day life, is important for the development and maintenance of consistent character and personality.

PROBLEMS With The Dominant (Usually Left) Temporal Lobe:

8. Aggression, internally or externally directed.
9. Dark or violent thoughts.
10. Sensitivity to slights; mild paranoia
11. Word-finding problems
12. Auditory processing problems
13. Reading difficulties
14. Emotional instability

PROBLEMS With The Non-Dominant (Usually Right) Temporal Lobe:

4. Difficulty recognizing facial expression
5. Difficulty decoding vocal intonation
6. Implicated in social-skills struggles.

PROBLEMS With Either Or Both Temporal Lobes:

10. Memory problems; amnesia
11. Headaches or abdominal pain without a clear explanation
12. Anxiety or fear for no particular reason
13. Abnormal sensory perceptions, visual or auditory distortions
14. Feelings of “déjà vu” or “jamais vu.”
15. Periods of spaciness or confusion
16. Religious or moral preoccupation
17. Hyper-graphia, excessive writing
18. Seizures

PRESCRIPTIONS:

The following prescriptions are geared toward optimizing and healing the temporal lobes:

10. *CREATE A LIBRARY OF WONDERFUL EXPERIENCES*

Strive for a series of experiences that keep you motivated, healthy and excited about your life. Record memorable experiences of your life with pictures, videos, dairy entries, etc. Re-experience your memories whenever you can.

11. *Sing Whenever /Wherever You Can*

12. *Use Humming And Toning To Tune Up Your Brain*

13. *Listen To Classical Music*

14. *Learn To Play A Musical Instrument*

- 15. Move In Rhythms
- 16. Get Enough Sleep
- 17. Eliminate Caffeine and Nicotine
- 18. Watch Your Nutrition

<b>Lesson No.</b>	8	<b>Title</b>	Writing a research report
<b>Goals of Lesson</b>	Ss become aware of the Los Angeles Unified School District required Culminating Task (& Periodic Assessment) and the End-Of-Unit-Assessment for this Instructional Design Unit.		
<b>Student “thinking-pulling” Questions for the Lesson</b>	What are we aiming for to successfully achieve this “mester” by performing the Culminating Task, Periodic Assessment and the EOUA for this Unit?		

Time per step (Best estimate)	Student activities at each step (What the students are doing)	Anticipated <ul style="list-style-type: none"> <li>▪ Student response</li> <li>▪ Questions &amp; Misconceptions</li> <li>▪ Errors at each step</li> </ul>	Teacher's support of student learning and Points to remember (Including planned teacher responses to "Anticipateds")	Materials and resources needed for each step
Intro-1 hr.	Ss will read and perform activities outlined in the Los Angeles Unified School District English / Language Arts Middle School Exposition Research Unit provided by the Instructional Services	Concern over required tasks: Culminating Task Periodic Assessment End-Of-Unit-Assessment	T. will up-load this entire UNIT of instruction on to her Web Site at Foshay L.C. so Ss can become familiar with the required tasks. T. will also up-load all previous lessons' class-generated instructional materials	<a href="http://www.foshaylc.net">www.foshaylc.net</a>  <b>Click on: TEACHERS &amp; STAFF</b> <b>Find: sadek</b> <b>Click on: Find NEXT</b> <b>Click on: RESEARCH AND EXPOSITION UNIT</b>
Develop-1 hr.				<b>See:</b> <b>Los Angeles Unified School District English / Language Arts Middle School Exposition Research Unit provided by the Instructional Services – Pages 1 and 2</b>
Conclude - 1 hr.	Ss reflect on "Features of Exposition."			<b>Module 1</b>

**Mid-unit Assessment(s) Embedded in above Lesson** (In order to monitor student learning and engagement)

Ss identified Features of Exposition and Text Features
<b>Evaluation Questions</b>
After-teaching questions about effectiveness of the lesson related to the learning goals
Did the students complete Module 1 successfully?
Broader after-the-lesson reflections

<b>Lesson No.</b>	9-15	<b>Title</b>	Writing a research report
<b>Goals of Lesson</b>	Students perform (selected) instructional activities in the Los Angeles Unified School District English / Language Arts Middle School Exposition Research Unit Instructional Services In preparation for Culminating Task, Periodic Assessment and End-Of-Unit-Assessment for this Unit.		
<b>Student “thinking-</b>	Can you find information about the brain systems we have studies and can you label each source as primary		

**pulling” Questions for the Lesson**

or secondary source of information?

<b>Time per step (Best estimate)</b>	<b>Student activities at each step (What the students are doing)</b>	<b>Anticipated</b> ▪ <b>Student response</b> ▪ <b>Questions &amp; Misconceptions</b> ▪ <b>Errors at each step</b>	<b>Teacher’s support of student learning and Points to remember</b> (Including planned teacher responses to “Anticipateds”)	<b>Materials and resources needed for each step</b>
Intro-Develop-Conclude-3 hrs. each lesson = 27 hrs.		Ss will have difficulty with the following concepts introduced and practiced in the LAUSD Exposition Research Unit: 1. Thesis 2. Direct Quotations 3. Paraphrasing 4. Summarizing 5. Personal Perspective 6. Primary source 7. Secondary source 8. Value (reliability, significance, authority) of sources of information 9. organization of information in graphs, charts, etc. 10. Conclusions 11. Analogy	T. works with Ss at PDC Ss. work individually at the PDC preparing their reports.  T. will provide models for each of these difficult concepts and ideas. Ss will research these topics through the Internet.	<b>See:</b> <b>Los Angeles Unified School District English / Language Arts Middle School Exposition Research Unit provided by the Instructional Services – Pages 3 to 7 Modules 2 to 7</b>

		<p>12. Use of quotation marks</p> <p>13. Comparisons</p> <p>14. Balance between information and personal original ideas</p> <p>15. Organizational structures of research reports</p> <p>16. UNITY</p> <p>17. COHERENCE</p> <p>18. LOGIC</p> <p>19. Internal Consistency</p> <p>20. Structural Patterns of Text</p>		
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<b>Mid-unit Assessment(s) Embedded in above Lesson</b> (In order to monitor student learning and engagement)
<b>Evaluation Questions</b> After-teaching questions about effectiveness of the lesson related to the learning goals
Did the students complete modules successfully?
Broader after-the-lesson reflections

<b>Lesson No.</b>	16	<b>Title</b>	Writing a research report -- Bibliography
<b>Goals of Lesson</b>	At the Foshay Learning Center School Library, students master citations for different sources of information		
<b>Student “thinking-pulling” Questions for the Lesson</b>	How do you document your sources?		

Time per step (Best estimate)	Student activities at each step (What the students are doing)	Anticipated <ul style="list-style-type: none"> <li>▪ Student response</li> <li>▪ Questions &amp; Misconceptions</li> <li>▪ Errors at each step</li> </ul>	Teacher's support of student learning and Points to remember (Including planned teacher responses to "Anticipated")	Materials and resources needed for each step
Intro-Develop-Conclude-3 hrs.	<p><b>Ss practice citing sources of information</b></p> <p><b>Ss. review the Culminating Task and prepare for the End-Of-Unit-Assessment</b></p>		T. works with Ss at Foshay L.C. Library and with the librarian	<b>See: Supplementary Material for this lesson</b>

<b>Mid-unit Assessment(s) Embedded in above Lesson</b> (In order to monitor student learning and engagement)
<p><b>Evaluation Questions</b></p> <p>After-teaching questions about effectiveness of the lesson related to the learning goals</p>
Did the students correctly practice writing citations while at the library?
Broader after-the-lesson reflections

# Supplementary Material for Lesson # 16

## Bibliography and Acknowledgements

See style sheet below. Include programs or textbooks used, if any, references, online sources used, sources of graphic and audio-visual materials. Include acknowledgements of collegial help and ideas

### Citations: Style Sheet

**Citation format** for “Source” and “Readings” sections in Unit Introduction (adapted from Modern Language Association Handbook)

#### 1. Book

- a. Author’s full name (last name first)
- b. Full title (including any subtitle) *Italicized*
- c. Edition (if the book is a second or later numbered edition or a revised edition)
- d. Number of the volume and the total number of volumes (if the books is a multivolume work)
- e. City of publication
- f. Shortened form of the publisher’s name
- g. Year of publication

#### Examples:

- One Author                      Green, Roger. *Tales of Ancient Egypt*: London, Puffin Group, 1967.  
Two Authors or More         Holms, John and Yen, Li. *The Crimson Shoe*: Shanghai, Lui, 1867.  
Ernst, Jacob et al. *Living in a Balanced World*: Florence, Nosotros, 2002.

#### 2. Article

- a. Author’s full name (last name first)
- b. Full title of article in quotes
- c. Title of Journal
- d. Volume number
- e. Year of publication
- f. Inclusive page numbers of the article (i.e., the number of the page on which the article begins, a hyphen, and the number of the page on which the articles ends)

#### Example:

Frith, Simon. “Isis & Osiris: Gods of Egypt.” *Archaeological Journal* 2 (2001): 10-16.

### 3. Newspaper

Hoover, Eric. "New Attacks on Early Decision." *Chronicle of Higher Education* 11 Jan. 2002: A45-46.

### 4. Internet Source

- a. Title of site (underlined)
- b. Name of the editor of the site (if given)
- c. Electronic publication information, including version number (if relevant and (if not part of the title), date of electronic publication or of the latest update, and name of any sponsoring institution or organization
- d. Date of access and URL

#### Example

Entire Internet Site

Bartleby.com:Great Books Online. Ed. Steven van Leeuwen. 2002 5 May 2002  
<http://www.bartleby.com/>

The Cinderella Project. Ed. Michale N. Salda. Vers. 1.1 Dec. 1997. DeGrummond Children's Lit. Research Collection, U of Southern Mississippi. 15 May 2002 <<http://www-dept.usm.edu/-eng.dpt/cinderella/cinderella.html>>

CNN.com 2002. Cable News network. 15 May 2002 <<http://www.cnn.com/>>.

VII. You have already written the sections of the initial draft of your unit. Please assemble (staple, spring-clip or binder) them in the following order:

- **Title and Authors' page**
- **Introduction (Incomplete first Draft)**
- **Bibliography**
- **Relationship of Unit to Curriculum**
- **Unit Sequencing Plan**
- **Lesson Plans (with supplemental materials for each lesson inserted after the corresponding lesson)**

When you have completed the assembly of your initial draft of the unit, give the unit to your *Lesson Design Study* instructor.