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Music and Test Taking Learning Strategies (part 2)

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- OSPI – Office of the Superintendent of Instruction (2004). WMEA (Washington Music Educators Association) standards of instruction or EARLs obtained from Washington State’s Music Educator’s convention February 13 and 14, 2004 and from (www.wmea.org)
- Pinnell, G.S., Pikulski, J.J., Wixon, K.K., Campbell, J.R., Gough, P.B., & Betty, A.S. (1995). Listening to children read aloud: Data from NAEP’s integrated reading performance record at grade 4. [Data file]. Washington, DC: National Center for Education Statistics.
- Rauscher, F. H., & Shaw, G. L. (1998). Key components of the Mozart effect. *Perception and Motor Skill*, 86: 835-841.
- Schlaug, G. (1999). Turning up the brain: Music and intellect. Presentation from the learning and the brain conference. Boston, MA.
- Seal, K. (2002, September 17). Myths of intelligence: How to maximize your child’s brainpower. *Family Circle*, 115, 46-47.
- Sousa, D. A. (2001). *How the special needs brain learns*. Thousand Oaks, CA: Corwin Press, Inc.
- Stanovich, K. E. (1980). Toward an interactive-compensatory model of individual differences in the development of reading fluency. *Reading Research Quarterly*, 16, 32-71.
- Stanovich, K. E. (1990). Concepts in developmental theories of reading skill: Cognitive resources, automaticity, and modularity. *Development Review*, 10, 72-100.
- Van Patten, C., & Bloom, P. (1999, February). Speech boundaries, syntax, and the brain. *Nature Neuroscience*, 2, 103-104.

Washington State Office of the Superintendent of Public Instruction. (1998). *Research into practice: An overview of music research for Washington State*. Olympia,

WA: Author.

Weinberger, N. W. (2000, Winter). The Mozart effect: A small part of the big picture.

MuSICA (The music and science information computer archive) Research Notes.

[Electronic Version]. Retrieved October 18, 2003, from

<http://www.musica.uci.edu/mrn/V7I1W00.html>

APPENDIXES

Appendix A

Definitions of Musical and Neurological Terms

Alpha waves – Heightened awareness and calm are characterized which vibrate and cycle from 8 to 13 hertz (Campbell, 1997).

Beat – The tempo, the constant feel of the music, the pulse. One can often instinctively feel the beat of the music. It's usually 50 to 150 beats per minute.

Beta waves – Are seen in daily activities or the ordinary consciousness which vibrate and cycles from 14 to 20 hertz (Campbell, 1997).

Cerebral cortex – Is the newspaper-sized, ¼" thick, is wrinkled, is six layers deep, is packed with brain cells and is the outermost layer of the cerebrum (Jensen, 2003).

Classical music – Is music from 1725 to 1900, with such composers as Mozart, Haydn, Rossini, and Beethoven.

Corpus callosum – Is a white-matter bundle of millions of nerve fibers which connect the left and right hemisphere and is located in the middle of the brain area (Jensen, 2003).

CTBS – Comprehensive Test of Basic Skills. (OSPI, 1998).

Delta waves – Deep sleep, deep meditation, and unconsciousness, which cycles from .5 to 3 hertz (Campbell, 1997).

Dendrites – Strand-like fibers emanating from the cell body. Similar to spider webs or cracks in the wall, they are the receptor sites for axons when they connect to make a synapse. Each cell usually has many, many dendrites (Jensen, 2003).

EEG – Detects and records brain waves from the surface of the skull and has yielded insight into normal brain development (MENC, 2000).

Hertz – A unit of frequency, as of waves, equal to one cycle per second

Hypothalamus – Is located in the bottom center of the mid brain area. Is a complex thermostat-like structure that influences and regulates appetite, hormone secretion, digestion, sexuality, circulation, emotions, and sleep (Jensen, 2003).

IQ – Intelligent quotient.

Melody – Is a pattern of tones that can become a main part of a piece of music that's easily identified. A melody is one that makes you want to sing along.

Oxytocin (ox-ee-toe-sin) – Is a peptide also known as the “commitment molecule.” It is released during sex and pregnancy and influences pair bonding (Jensen, 2003).

Planum temporale – Is an area of the brain associated with language processing located in the left side of the brain, is also more pronounced in musicians (Jensen, 2003).

Pitch – The main sound wave frequency of an instrument or voice.

Rhythm – A pattern of music that is determined by the length of sound or the amount of sound that is accented.

SAT – Scholastic Apparel Tribulation.

Tempo – The speed of the music. The amount of notes per second is the equivalent to the beats per minute.

WASL – Academic tests that are given to students in the State of Washington at the 4th, 7th, and 10th grades that measure student learning.

Appendix B
Completion Certificate

This is to certify that

Theresa Ogan

has completed the Human Participants Protection Education for Research Teams online course, sponsored by the National Institutes of Health (NIH), on 03/01/2003.

This course included the following:

- Key historical events and current issues that impact guidelines and legislation on human participant protection in research.
- Ethical principles and guidelines that should assist in resolving the ethical issues inherent in the conduct of research with human participants.
- The use of key ethical principles and federal regulations to protect human participants at various stages in the research process.
- A description of guidelines for the protection of special populations in research.
- A definition of informed consent and components necessary for a valid consent.
- A description of the role of the IRB in the research process.
- The roles, responsibilities, and interactions of federal agencies, institutions, and researchers in conducting research with human participants.

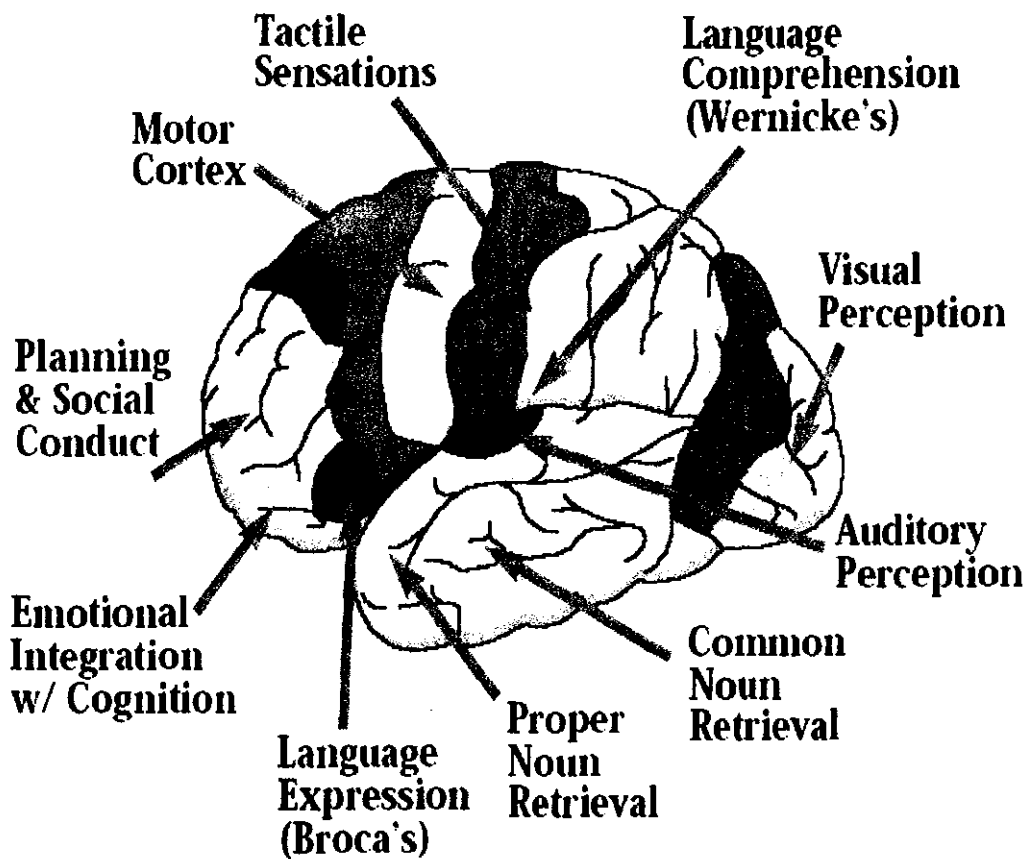
National Institutes of Health
<http://www.nih.gov/>

Appendix C

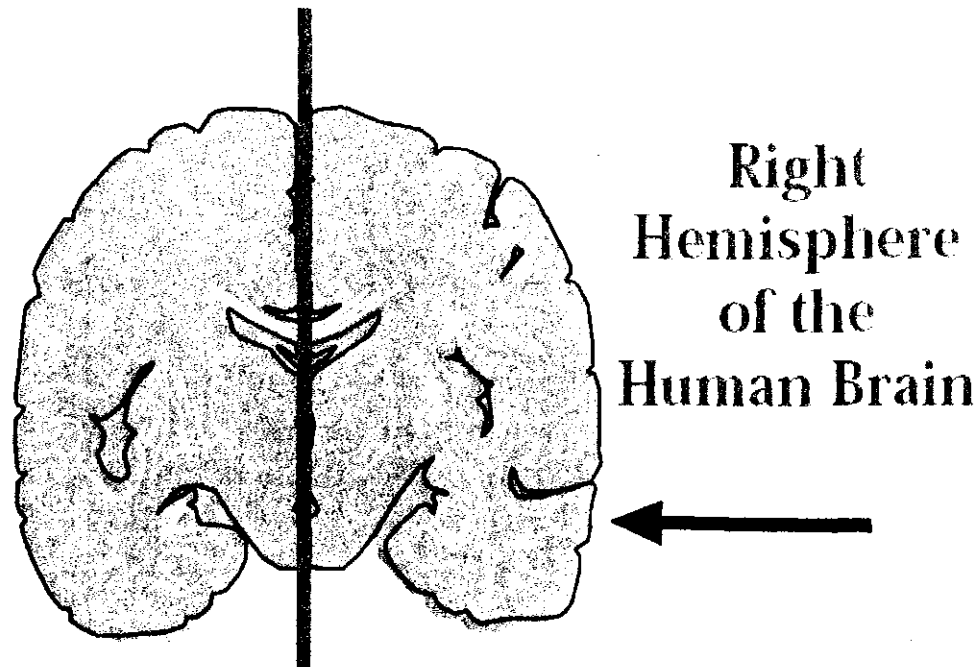
Images and Illustrations of the Brain

Where in the Brain Does it Happen?

*Reminder: All Functions Activate
Multiple Locations and Systems*



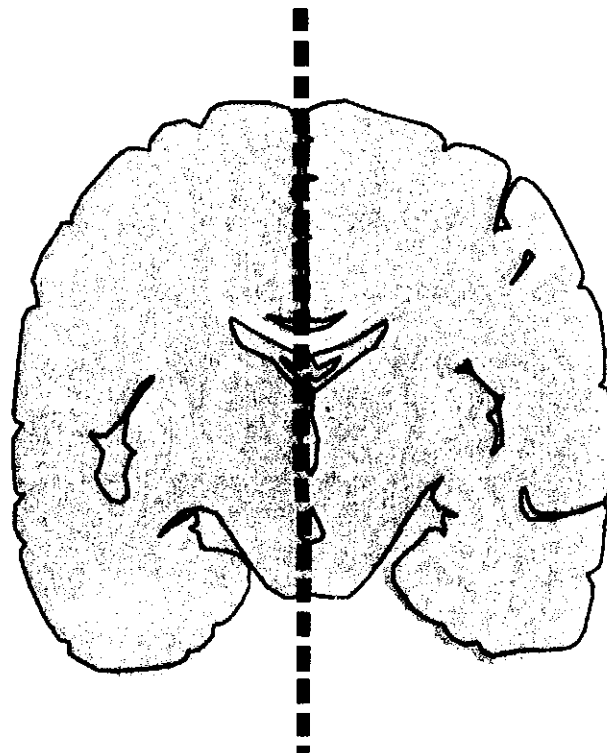
Source: Jensen (2002)



- ◆ **Learns randomly, sequencing unimportant**
- ◆ **Works with wholes**
- ◆ **Better with pictures, space and color**
- ◆ **Known for "avoidance" behaviors**

Typically, our right hemisphere is associated with random, spatial, concrete thinking, and processing of "wholes." Contrary to popular belief, it is not necessarily the creative hemisphere. In less than 5% of the population, it processes language. More associated with "avoidance" behaviors. Matures earlier in boys than it does in girls.

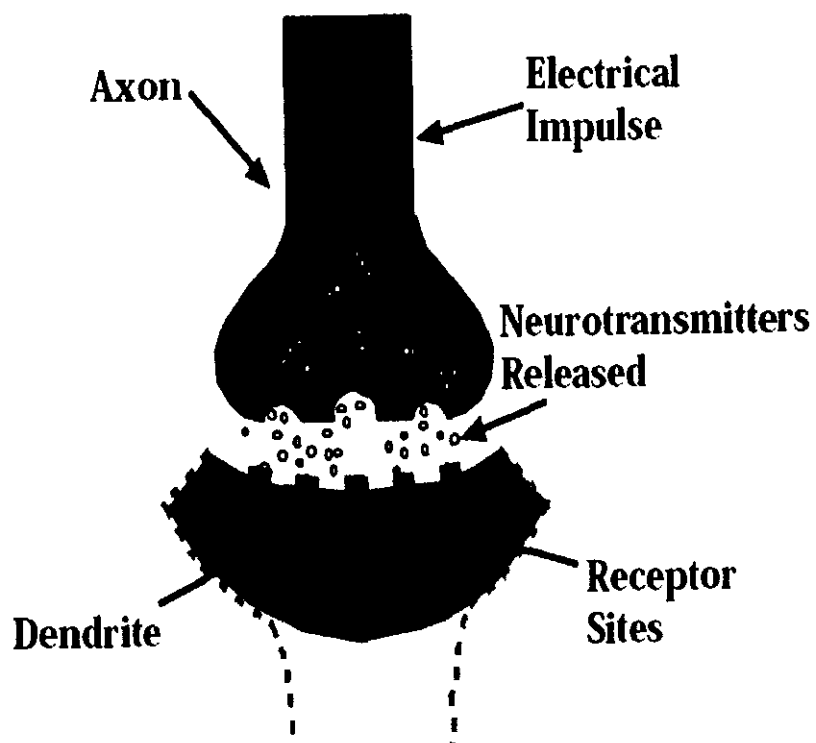
Left Hemisphere of the Human Brain



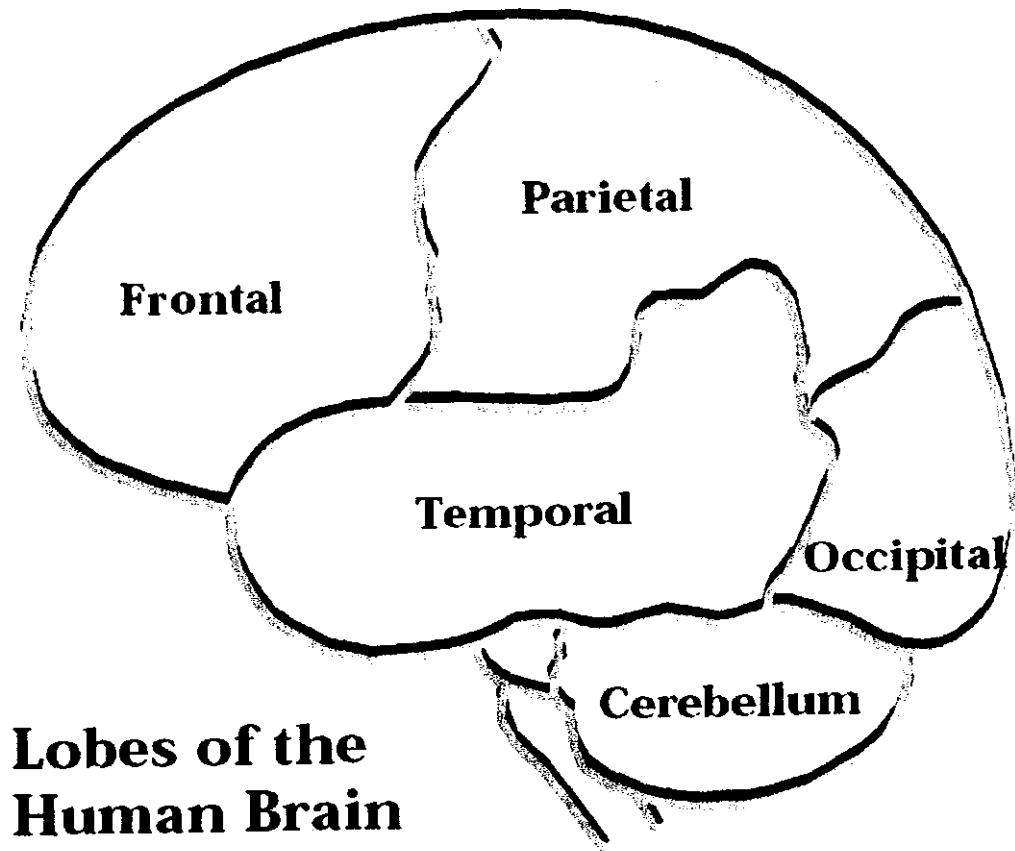
- ◆ **Learns in sequences**
- ◆ **Works with parts**
- ◆ **Better with language**
- ◆ **Acts as “interpreter” to our daily lives**
- ◆ **Known for “approach” behaviors**

Typically, the left hemisphere of the brain is associated with sequential and linear thinking. It processes “parts” better than wholes. It is not innately logical. In over 95% of the population, it processes language and “interprets” our daily life. It matures earlier in girls than boys.

Synapse



Source: Jensen (2002)



**Lobes of the
Human Brain**

Source: Jensen (2002)

Appendix D

Pamphlet

(See attached brochure)

(OSPI, 2004)

The Arts

EARLs

(Essential Academic Learning Requirements)

- 1) The student understands and applies Arts knowledge and skills.
- 2) The student demonstrates thinking skills using artistic processes.
- 3) The student communicates through The Arts.
- 4) The student makes connections within and across The Arts, to other disciplines, life, cultures and work.



The Creative Process:

2.1 Applies a creative process in the arts:

- Conceptualizes the context or purpose
- Gathers information from diverse sources
- Develops ideas and techniques
- Organizes arts elements, forms, and/or principles into a creative work
- Reflects for the purpose of elaboration and self-evaluation
- Refines work based on feedback
- Presents work to others

The Performance Process:

2.2 Applies a performance process in the arts:

- Identifies audience and purpose
- Selects artistic work (repertoire) to perform

- Analyzes the structure and background of work
- Interprets by developing a personal approach to the work
- Rehearses, adjusts, and refines through evaluation and problem solving
- Presents work for others
- Reflects and evaluates

The Responding Process:

2.3 Applies a responding process to an arts presentation:

- Engages actively and purposefully
- Describes what is seen and/or heard
- Analyzes how the elements are arranged and organized
- Interprets based on descriptive properties
- Evaluates using supportive evidence and criteria



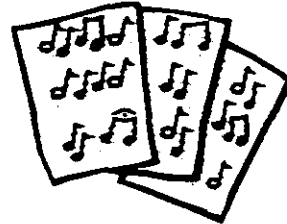


The identification of a standard for music programs has a three-fold purpose:

- 1) To assist the school administrator to aim for a high student achievement level when redesigning a school district's music and overall arts program.
- 2) To help the music educator understand the importance of a well-rounded music program that provides offerings for all students and advanced instruction for students wishing to pursue additional classes in music.
- 3) To provide an outline for development for classes which teach to the Washington Arts EARLs.

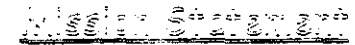
An informative new publication from the National Association of State Boards of Education entitled, "*Ensuring a Place for the Arts in America's Schools.*"

Can be ordered at:
www.nasbe.org



The Arts website on the OSPI website for multiple links regarding arts education research, staff development, resources, connections, EALRs, frameworks, coming events, state law, federal law and arts education for life is:
www.k12.wa.us/curriculumInstruct/arts

John Newbery Elementary Music Program



To nurture talent, skills and creativity in students by providing musical connections within and across The Arts, to other disciplines, and cultures.

Music Department
Wenatchee
School District
May 2004