



## ***Meadowbrook Educational Services, Inc,***

### ***MES Assessment***

### ***Information & Resources***

Meadowbrook Philosophy: We believe in the neuroplasticity of the brain. We work through a combination of cognitive and non-cognitive programs to increase the foundational skills needed for the brain to effectively learn and communicate.

Meadowbrook Educational Services (MES) was founded by Renie Smith in 1998. Meadowbrook is a small family run corporation.

We work with people who struggle to communicate and learn from 2 years to 70+. We utilize a variety of educational programs and often customize foundational curriculum to our clients needs. Every Meadowbrook Program is unique to the goals of our clients. All programs are educational.

Renie, our president, has worked extensively with children and adults for the last 30 years. We work locally with school home link programs, parents and students, and DVR clients. We also travel to different countries like Africa, Bahamas, England, Guatemala, India, Malaysia, and Singapore. We help clients and train parents & educators in programs to enhance learning.

Staff training includes: Structure of Intellect (SOI), Brain Gym, Slingerland, Davis, Spalding, Audiblox, Total Reading, Establishing Foundational Skills for Academic Proficiency (EFSAP), Trauma Incident Reduction (TIR), Advanced Brain Technologies—The Listening Program Air & Bone Conduction, and training with Richard Lavoie, a world renowned expert on learning disabilities. We attend conferences for learning disabilities & communication difficulties, and continue to comb the world for useful programs.

In 2005 we started developing a program for 3-5 year olds to supply the foundations we found missing in 2<sup>nd</sup>-5<sup>th</sup> graders—the majority of our clientele. Positive results from testing in at-risk kindergartens has spurred the development of a home program for parents to use who are concerned their children may develop learning disabilities in later life.

[www.efsap.com](http://www.efsap.com)

## **Counselor & Client (alphabetical)**

### **Brain-Boy®: Low Level Function Tests of Auditory and Visual Processing**

Brain-Boy® Universal tests central processing and perception of the human brain. Brain-Boy® tests at low-level function. Low level function refers to automatic recognition of basic acoustic characteristics such as resolution or time/frequency.

Visual order threshold: Simply – the speed at which the brain is seeing. The ability of the brain to digest and process visual information – its processing speed. *This test is measured in milliseconds.*

Auditory order threshold: Simply – the speed at which the brain is hearing. The ability of the brain to digest and process auditory information – its processing speed. *This test is measured in milliseconds.*

Spatial hearing: Simply – the location of sounds without visual help; measures how correct spatial hearing is. *This test is measured in microseconds.*

Pitch Discrimination: Simply – measures accuracy of pitch discrimination. A decisive aspect of speaking is to recognize the word stress of the pronunciation. The most important prerequisite is to be able to recognize small tone differences. *This test is measured by percent.*

Auditory & Visual Motor-Timing: Simply – the ability to perceive stimuli and convert them to movements quickly. Temporary assimilation of information plays a very important role for thinking, speaking and writing. Auditory and visual information has to be perceived, taken apart, re-arranged and analyzed by the brain. Fast temporal assimilation in the brain is extremely important to react quickly to the word's meaning. *This test is measured in milliseconds.*

Auditory Reaction Time: Simply – measures auditory reaction time. Auditory reaction time is usually an innate reflex used in many environments but especially important in dangerous situations. *This test is measured in milliseconds.*

Frequency Pattern Test: Simply – measures the perception of different tone patterns. Each sound has a distinct auditory representation in the brain. The more accurate the inner representation is, the better sounds and language patterns can be discriminated and perceived. *This test is measured in milliseconds.*

Duration Pattern Test: Simply – measures the perception of different sound length patterns. Each sound has a distinct auditory representation in the brain. The more accurate the inner representation is, the better sounds and language patterns can be discriminated and perceived. *This test is measured in milliseconds.*

### **Spatial Visualization Exercise**

The spatial visualization exercise determines if and how a client navigates their mind-screen. Most people can see a picture (most thoughts are stored with picture/tactile/sound components) in their mind. Only 10% - 15% of the United States population: 1) can view the picture as a movie 2) can easily change perspective in their imagination.

### **Writing Sample (dictated and copy)**

Basic foundational skills for writing are checked (hand strength, pencil holds). Client's formation of symbols, the lines used to form symbols, the spelling of the words within the

sentence, punctuation and grammar usage are all checked. The counselor also observes the client's stress behaviors during writing tasks.

#### Digit Span Test *Informal*: Visual and Aural

Digit Span is the amount of information that can be stored in short term (working) memory. How well a person learns is reflected by how well information is processed, stored and retrieved. There is a correlation between digit span and grade point equivalent. The National Association for Child Development (NACD) states, "We have observed that individuals with learning, attention and social problems have a digit span of 4-6." "We continually observe children who develop at a rate slower than one digit per chronological year will suffer delays in language, social and cognitive development and lag behind their peers." Normal Adult digit span is  $7-9 \pm 2$  or a range from 5-11. Digit span normally develops 1 digit per year per age until age of seven.

#### Directionality Performance

One demonstrates knowledge of direction by performing an Arrow Chart Exercise. The counselor watches for hesitations and mistakes – auditory and motor.

#### Proprietary MES Thinking & Perception questionnaire

Learning begins when one learns how to remember. How one remembers is how information is processed. This questionnaire is designed to learn how the client is thinking & remembering.

Environment can have a large effect on the learning process. For example; fluorescent lights, sounds and reflective paper can affect the learning process for some children.

#### Houghton Mifflin Informal Reading Inventory: Little Bear

Little Bear is a pre-primer level story and it contains many non-picturing words. As it is read aloud the counselor observes client's reading behaviors and notes errors.

#### Math Skills

This basic math test covers addition through division.

#### Memory Recall Questionnaire

#### Perception Worksheets (primer – 2<sup>nd</sup> grade)

Three worksheets designed to show if the client can visually discriminate, identify and perceive information. These sheets do not use alphabetic or numeric symbols.

#### San Diego Quick Assessment or Graded Word List

This assesses a person's word recognition level. The levels checked are pre-primer through ninth grade. They are scored into three categories, Independent, Instructional and Frustration.

- Independent Reading Level: level the student can read without any help from a teacher.
- Instructional Reading Level: Level at which the material is too difficult to read independently.

- Frustration Reading Level: Level is too difficult for the student to read.

### The Spence Children's Anxiety Scale - optional

The Spence Children's Anxiety Scale was developed to assess the severity of anxiety symptoms broadly in line with the dimensions of anxiety disorder proposed by the DSM-IV.

The scale assesses six domains of anxiety including generalized anxiety, panic/agoraphobia, social phobia, separation anxiety, obsessive compulsive disorder and physical injury fears. It is designed to be relatively easy and quick for children to complete, normally taking only around 10 minutes to answer the questions.

Stress has a direct impact on academic skills. A measurement of stress is useful when tracking performance.

### Client Interview

This section of the MES Assessment allows the client to report on their issues from their perspective. This scale does not assess competence; rather the client's idea and perception of how he/she is doing.

### Synaesthesia pop-out

Synaesthesia is the ability to see specific colors when viewing symbols such as numbers or letters. It has been documented since the 1880's and a small portion of the population continues to exhibit this phenomenon. Synaesthesia tends to run in families. This task is designed to identify these individuals.

## **Parent Survey or Adult Client Interview**

During the parent interview MES staff and parents review the eleven page questionnaire the parent(s) previously filled out. Any comments and concerns not addressed in the questionnaire are identified.

(Alphabetical Order)

### Developmental

The brain has windows of time to develop and automate skills. If certain traumas, allergies, or ear infections happen during those windows of time neural development will be affected.

### Diet

Diet's impact on learning is well studied. Eating foods high in refined sugar, foods one is intolerant or allergic to may affect the ability to learn.

### Educational, Medical & Psychological Evaluations

Prior evaluations and their results/diagnoses are noted.

### Emotional Adjustment

Sensory Integration issues may effect how emotion is displayed.

### Eye Movement, Teaming and Coordination Skills Questionnaire

These questions check for possible eye issues that may need referral to an eye doctor and for possible confusions with printed symbolic information.

- Eye Movement Skills - the ability for eyes to move smoothly, accurately and effortlessly in tandem when following a line of print or a bird soaring through the air.
- Eye Teaming Skills - the ability to use eyes together smoothly, equally, simultaneously, and accurately. Spatial localization, depth perception and clear image accuracy depend upon paired action of the eyes.
- Eye-Hand Coordination Skills - This ability depends on using, practicing and integrating eyes and hands as paired learning tools.

### General Academic Skills, Math, Time & Organization

Basic skills such as listening, reading and writing are required to be proficient for advancement in school. If the client is missing low-level skills school becomes increasingly difficult.

### Listening: Receptive and Expressive Listening and Language Profile

The ability to listen cannot be seen. The only way to gauge listening is indirectly – through evaluation of related skills. This checklist offers a catalog of such skills enabling us to assess the client's ability to listen. There is no score and no 'right or 'wrong'

- Receptive Listening focuses outside of self, relative to what others are saying; what is going on in a school setting, or home.
- Expressive Listening focuses inside self, including: checking, monitoring and reproducing correctly what one hears, especially one's own voice and speech.
- Behavior and Social Adjustment notes behaviors and attitudes that may accompany a listening or visual perception problem.
- Level of Energy: the ear acts as a dynamo, providing us with electrical energy that stimulates the brain and nervous system – notes excess or lack of energy.
- Motor Skills are related to the vestibular system of the ear and affect balance, coordination, body image and spatial orientation.

### Social Anxiety & Depression questionnaires (Adult only)

Often learning issues can generate stress, social anxiety, and depression. If adults cannot communicate their thoughts effectively they will endure more stress or generate more socially unacceptable behaviors. These self-report scales are used to obtain an initial baseline.

1. Goldberg Depression Questionnaire; Liebowitz Social Anxiety Scale; 3. CES-D Depression Scale.

## Resources

Meadowbrook Educational Services, Inc.

[www.MeadowbrookEducation.com](http://www.MeadowbrookEducation.com)

Advanced Brain Technologies

web-site [www.advancedbrain.com](http://www.advancedbrain.com)

Information: Research and products for sound therapy.

Book: *The Power of Sound* by Joshua Leeds.  
(Many books available – this one is very readable.)

web-site [www.brainbuilder.com](http://www.brainbuilder.com)

Information: Research and products for digit span.

Audiblox website: [www.audiblox.com](http://www.audiblox.com)

Information: Research, Surveys and papers about application of the Audiblox system in schools and in private practice. Also information about increasing IQ and digit span.

Brain Gym website

<http://www.braingym.org/experience.html>

Information: How movement affects learning and the brain – sensory integration.

Book: *Smart Moves: Why Learning is not all in Your Head* by Carla Hannaford, Ph.D

Davis Dyslexia Association International

web-site [www.dyslexia.com](http://www.dyslexia.com)

Information: Articles and papers on dyslexia from the viewpoint of perception control.

Book: *The Gift of Dyslexia* by Ron Davis

Book: *The Gift of Learning* by Ron Davis

Pat Wyman Web-site [www.howtolearn.com](http://www.howtolearn.com)

A website full of information for parents and professionals.

LD Online: <http://www.ldonline.org> A website full of information for parents and professionals.

Linda Silverman web-site

[www.gifteddevelopment.com](http://www.gifteddevelopment.com)

Information: Research and papers on visual-spatial learners.

Book: *Upside Down Brilliance: The Visual Spatial Learner* by Dr. Silverman

Math-U-See web-site

[www.polishedapple.com](http://www.polishedapple.com)

Information: a kinesthetic/visual approach to math, excellent for Visual-Spatial thinkers.

National Association for Child Development

web-site [www.nacd.org](http://www.nacd.org)

Information: Research articles and papers on all spectrums; Autism, Down's Syndrome, Dyslexia etc. NACD is sponsoring project 9+2.

Dr. Perlmutter website [www.perlhealth.com](http://www.perlhealth.com)

Information: Information on nutrition & its relationship to the brain.

Books: *The Better Brain Book*

BrainRecovery.com

Richard Lavoie's videos are: *Frustration*

*Anxiety and Tension: The F.A.T. City workshop*

*LD and Discipline: When the Chips are Down...*

*LD and Social Skills: Last one picked... First one Picked on*

Richard Lavoie's audio clips:

[http://www.ldonline.org/audio\\_clips/lavoie.html](http://www.ldonline.org/audio_clips/lavoie.html)

Videos to purchase:

<http://ldonline.learningstore.org/categories/lavoie.html>

Find Videos available in libraries near you:

<http://worldcatlibraries.org/wcpa/ow/456fa5c911637ebfa19afeb4da09e526.html>

<http://worldcatlibraries.org/wcpa/ow/a19ed866700ea140a19afeb4da09e526.html>

Structure of Intellect (SOI)

Website: [www.soisystems.com](http://www.soisystems.com)

Information: Structure of Intellect development and application — tests 90 areas of intelligence.

Book: *The Structure of Intelligence: Its Interpretation and its Uses* by Dr. Mary Meeker.

Other Helpful Websites:

<http://www.helpguide.org/>

<http://www.smartkidswithld.org/index.html>

<http://www.ldanatl.org/index.cfm>

<http://www.ncld.org/>