

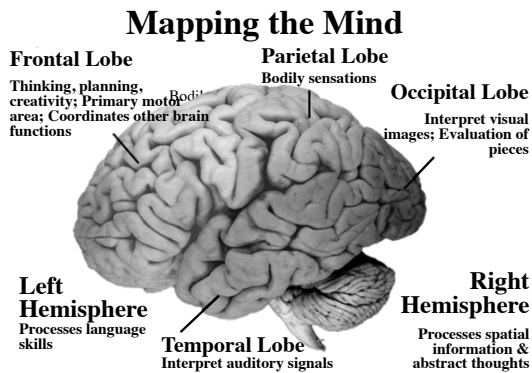


Respecting Each Child's Learning Differences

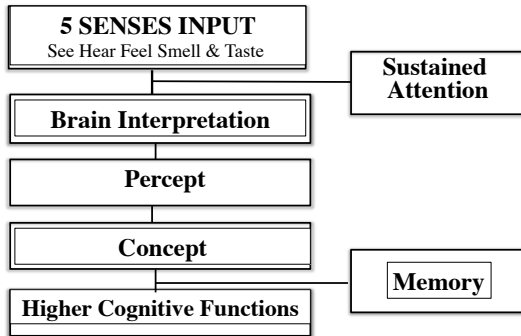
JOYCE S. PICKERING, HUM.D.

SHELTON SCHOOL & EVALUATION CENTER
15720 HILLCREST RD
DALLAS, TEXAS 75248
WWW.SHELTON.ORG

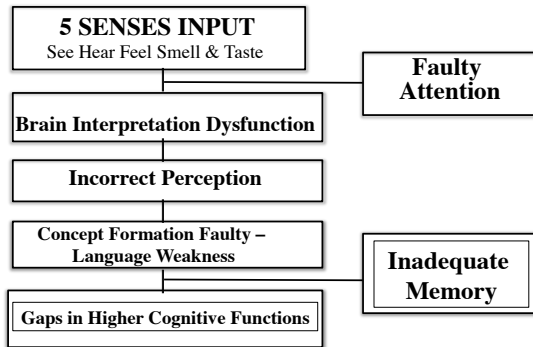
Why Do We Need To Understand The Brain And How It Processes?



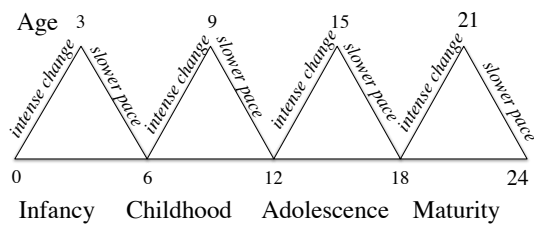
PROCESSING CHART



PROCESSING WITH DYSFUNCTIONS

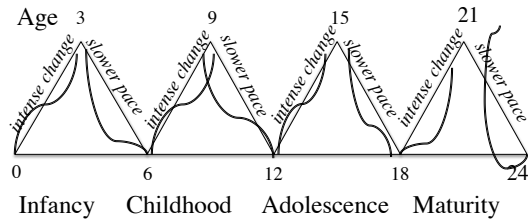


Four Planes of Development



"Montessori education is geared to peaks and valleys of human formation." Dr. Montessori suggested we "divide education into planes and each of these should correspond to the phase the developing individual goes through".

Four Planes of Development



The development of the “at risk” child is uneven. Some areas are developing typically; others are not. The sensitive periods are different. Since the development in the first 6 years is different, all other periods of development are affected.

Normalization The Absorbent Mind Maria Montessori

“The human being is a united whole, . . .
unity has to be built up and formed by
active experiences in the real world...”

Normalization The Absorbent Mind Maria Montessori

“The embryonic development of each its
parts, which is at first carried on separately
from birth ‘til three, must in the end become
integrated, when it will be so organized that
all these parts act together in the service of
the individual. This is what is happening
during the next period, from 3 to 6, when the
hand is at work and the mind is guiding it.”

Normalization
The Absorbent Mind
Maria Montessori

“If outer conditions prevent this integration from occurring, then the same energies go on urging each of the partial formations to continue their activities apart from the others. This results in unequal development, divorced from its proper ends.”

Normalization
The Absorbent Mind
Maria Montessori

“The hand moves aimlessly; the mind wanders about far from reality; language takes pleasure in itself; the body moves clumsily. And these separate energies, finding nothing to satisfy them, give rise to numberless combinations of defective and deviated growth, which become sources of conflict and despair.”

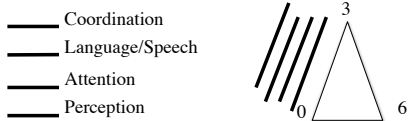
Normalization
The Absorbent Mind
Maria Montessori

“Such deviations cannot be attributed to the personality itself. They come from a failure to organize the personality.”

Normalization
The Absorbent Mind
Maria Montessori

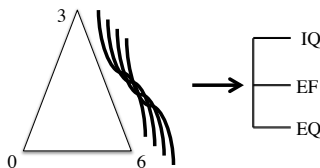
These deviations . . . “can only be corrected when all the powers are functioning as one to serve the ends of the whole individual.”

The First Plane 0 - 3 Years



Each area of development proceeding along a separate developmental track as coordination, language, attention and perception mature, which is the beginning of the creation of IQ, EF and EQ.

The First Plane 3 - 6 Years



By 3 years in the typically developing child Coordination, Language-speech, Attention and Perception have matured to equal levels of ability. Then at 3 - 6, these abilities are able to be integrated, leading to the resulting cognitive ability (IQ), executive functioning (EF), sustained attention, organization skills, ability to prioritize and also social skill competence/adaptive ability (EQ).

Montessori for the LD Child

Montessori wrote:

“ The difference in reaction between deficient and normal children in the presentation of didactic material made of graded stimuli, is plainly seen from the fact that *the same didactic material used with deficient makes education possible, while with normal children it provokes autoeducation.*”

Maria Montessori *The Montessori Method*

Montessori on Varying Exceptionalities

Montessori also stated that in a classroom of normal PS children, the knobbed cylinders were presented to 3 year olds and it was a favorite exercise. For the “retarded” child, she pointed out, that it was necessary to begin with simpler exercises, in which the stimuli was much more strongly contrasted and many other exercises would need to precede this one.

Maria Montessori *The Montessori Method*

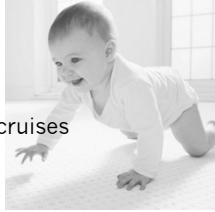
If you would identify children who are high risk for academic learning tasks, with the goal of providing early intervention, evaluate:

- **Coordination**
- **Language**
- **Attention**
- **Perception**

Sylvia O. Richardson, M.D., February 1987

Development of Motor Skills - Coordination

- 0 - 1st weeks - lifts head
- 3 - 4 months - turns over
- 6 months - sits up
- 9 months - crawls
- 10 - 11 months - pulls up, cruises
- 12 months - first steps



Motor Development - cephalocaudal (head to tail)
- proximodistal (midline out)

Development of Language - Speech Skills



- 0 - 3 months - crying, cooing
- 3 - 6 months - babbling
- 6 - 9 months - echolalia
- 10 - 12 first words

Vocabulary develops 0 - 5 years
Enter 1st grade with 2,500 - 5,000 word vocabulary

Development of Attention

- **Birth to 2 1/2 to 3 years** - no inhibition control.
- Attends to all incoming sensory input.
- By **3 years** of age typically **selective attention** is developing.
- The child can wait for a short interesting lesson to be presented.



Development of Perception

- A **typical child** perceives gross sensory input such as light, sounds, textures, smells, tastes from their early months of life.
- In development from **birth to 3 years**, the child becomes more able to perceive visual and auditory input and begins to discriminate.
- From 3 - 6 years the typical child can refine discrimination from gross to finer and finer perceptual ability as seen in the Montessori sensorial curriculum.

Importance of Assessment

- Assessment provides a profile of the learner's strengths and weaknesses.
- Assessment is done to inform the educator and to help the child.



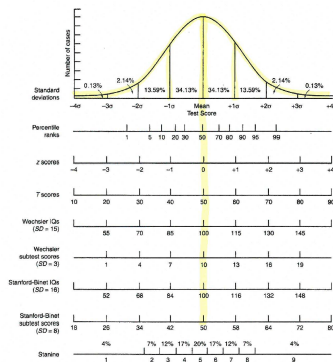
Assessment is Targeted Observation

- Parent Questionnaire
- Teacher Questionnaire
- Mental Development
- Perceptual Development
- Language Speech Development
- Pre-academic / academic skills
- Behavioral Checklists/Executive Function (EF)

Screening Battery

- Slosson Test of Intelligence - Revised (4.0+)
- Draw a Person (3.0+)
- Beery VMI (3.0+)
- CTOPP (Phonological Awareness / Rapid Naming (4.0+)
- Gates Oral Subtest (4.0+)
- Alphabet Sample (4.0+)
- Number Sample (4.0+)
- Gilmore Oral Reading Test, 5th Edition (5.0+)
- Gates Oral Spelling (5.0+)
- WRAT – Math (5.0+)

Normal Curve



Patterns of Dyslexia & Related Disorders

Patterns of Learning Disorders

- Pattern 1 - Reading Disorder (Dyslexia)
- Pattern 2 - Related Disorder: Reading Comprehension Disorder
- Pattern 3 - Related Disorder: Attention Deficit / Hyperactivity Disorder

Patterns of Learning Disorders

- Pattern 4 - Related Disorder: Math Disorder (Dyscalculia)
- Pattern 5 - Related Disorder: Motor Incoordination
- Pattern 6 - Related Disorder: Oral Language Disorder (Dysphasia)

Patterns of Learning Disorders

- Pattern 7 - Related Disorder: Social Interaction
- Pattern 8 - Related Disorder: Mood/ Anxiety
- Pattern 9 - At Risk for Learning Disorders
 - Weakness in Coordination
 - Weakness in Language
 - Weakness in Attention
 - Weakness in Perception

What Is A Language Learning Difference?

Definition of Language Learning Differences

A language-learning different child shall be defined as a child with:

- average or above-average intelligence
- adequate vision and hearing
- without primary emotional disturbance
- who has failed or is at high risk to fail when exposed to school experiences using conventional educational techniques.

Dyslexia Definition Adopted by US National Institutes of Health

- One of several distinct learning disabilities;
- Specific language-based disorder of constitutional origin characterized by single word decoding
- Reflects insufficient phonological processing abilities
- Difficulties in single word decoding - unexpected in relation to age & other cognitive & academic abilities.

Dyslexia - NIH Definition Cont.

- Not the result of generalized developmental disability or sensory impairment
- Manifested by variable difficulty with different forms of language, including in addition to problems reading, conspicuous problem with acquiring proficiency in writing and spelling.

Related Disorders

Refers to learning difficulty in:

- Oral Language Disorder (Dysphasia / Aphasia)
- Reading Comprehension Disorder
- Attention Deficit Hyperactive Disorder (ADHD)
- Math Disorder (Dyscalculia)
- Coordination Disorder
- Social Skills Disorder (Pragmatic Language Impairment)

Attention Deficit / Hyperactivity Disorder (AD/HD)

ADHD refers to a family of chronic neurobiological disorders that interfere with people's capacity to attend to tasks, regulate activity, and inhibit behavior in ways appropriate to their age and circumstances.


Attention Deficit Hyperactivity Disorder (ADHD) DSM 5 (314.01)

Three Types

- Inattentive
- Hyperactive
- Combined

Neurotransmitters


Play a vital role in key bodily functions.

 **Acetylcholine** - widespread in the brain - involved in muscle action, learning & memory

Dopamine - plays major role in regulation of movements & emotions

Norepinephrine - involved in reward, mood regulation, arousal, activation fight/flight behavior

Serotonin - regulates body temperature, pain perception, onset of sleep

 **Endorphins** (opioids) - minimize pain, produce feelings of pleasure

AD/HD

AD/HD may be caused by a lack of precise regulation of neurochemicals in the brain (i.e., fluctuating amounts of dopamine) (SchwabLearning.org - "What is the Environment's Effect on Reading Problems?" The Expert Answers: Gordon F. Sherman, Ph.D.)

ADHD - Individuals Benefit From Medication and Exercise

- Appropriate amount of sleep
- Eating a well balanced diet
- Exercise
- Prayer or Meditation
- Medication (if needed)

Dr. Edward Hallowell
Driven to Distraction
And
Dr. John Ratey - *Spark*

Positive Effects of Medication/Exercise

- Brain is normalized for attention, impulse control
- Improved sustained attention
- Improved impulsivity
- Improved learning due to increased memory
- Better organization, less scatter
- Less risk of illegal drug use
- Less side effects of anxiety, depression, suicide

What Does The Montessori Curriculum Give Us That Helps The At Risk Student?

- Individualization
- Techniques for training attention
- Classroom Structure (boundaries, privileges)
- Work Organization
- Manipulative Materials (Concrete to Abstract)
- Gross and Fine Motor Development

What Does The Montessori Curriculum Give Us That Helps The At Risk Student?

- Oral Language Development
- Academics presented in small sequential steps
- Enhancement of Social Skills (Grace and Courtesy)
- Environment of Encouragement (De-emphasis on failure)

Strategies to Match the Developmental Level of the Learning Different Student

- Individualization
- Attention
- Structure
- Organization
- Manipulative Materials
- Gross and Fine Motor Development
- Oral Language Development
- Written Language Development
- Social Skills
- Environment

Part Two

What Does The Montessori Curriculum Give Us That Helps The At Risk / LD Student?

And What Else Does the Montessorian Need to Know?

Montessori Applied to Children at Risk

A method which provides for:

- **Individualization** of instruction through the child's interaction with the didactic materials proceeding at his own rate for mastery

Individualization

- Analytical observation and assessment guide presentations
- Student needs more teacher presentations to guide their work



Individualization



Montessori Applied to Children at Risk

- ✓ Presentations of **academics in small sequential steps** with scientifically researched materials to further skill development in language, math, geography, history, physical and biological sciences, art and music.

Academics in Small Sequential Steps



Montessori Applied to Children at Risk

- ✓ Specific procedures / techniques for training **attention**
- ✓ Student's sustained attention is equally the responsibility of the teacher and the student

The At Risk Child Requires: Direct assistance on attention, focus, and concentration



Attention



Montessori Applied to Children at Risk

- ✓ A classroom structure, clear in limits and privileges, which assists the child with faulty inhibition control to develop those skills
- ✓ Increased and specific boundaries
- ✓ Direct teaching of a cycle of work
- ✓ Clear understanding of privileges and consequences

Classroom Structure



Montessori Applied to Children at Risk

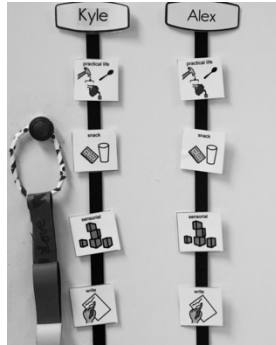
- ✓ An emphasis on **work organization** which gives a child a model for learning how to set up and go about work tasks, the result of which can be a lifelong habit of investigation
- ✓ Consistent placement of materials in presentation
- ✓ Awareness of left/right directionality confusion
- ✓ Need for contracts to help the student learn to prioritize

Work Organization



The At Risk Child Requires:

- Guidance in selecting and performing tasks



Name: _____

practical life	
language	
oral language	
sensorial	
math	

Date: _____

writing	
cultural	
association	

Weekly Contract

Name: _____ Date: _____

Works	Monday	Tuesday	Wednesday	Thursday	Friday
Practical Life					
Sensorial					
Math					
Language					
Cultural					
Computer					

Date:	04/04	04/05	04/06	04/07	04/08	
	MON	TUE	WED	THURS	FRI	NOTES
MATH 2+						
Facta Sheet						
Yellow/Green						
Montessori Math						
2, 3, 5						
Money Work						
Fractions / Decimals						
Geometry						
LANGUAGE 3						
Language Therapy						
S.E.E. / AP						
Writing Mechanics						
D, W, N, O						
I, E, F						
Punctuation / Spelling						Daily*
Syllables						
SCIENCE						
Communication						
Europe						
Travelers Code						
Tree						
A, B, C						
CULTURAL 3						
Communication						
History						
Days of the Month						
Calendar						Rhythmology*
Months						
Seasons						
Social Skills						
Library						
PT / OT / Speech						

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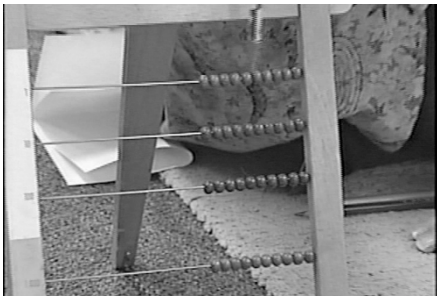
- ✓ **Manipulative materials** which provide the child with multisensory perceptions which help concretize abstract concepts

- Tasks reduced to smaller segments
- Segments based on perceptual assessment / observation of perceptual motor development
 - Show/feel similarities, & differences (sensorial)
 - Teach transitions (abacus)
 - Teach patterns (hundreds board)

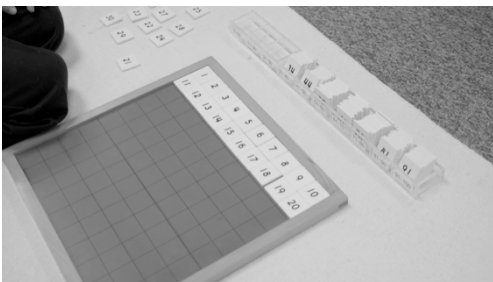
Manipulative Materials



Teach Transitions



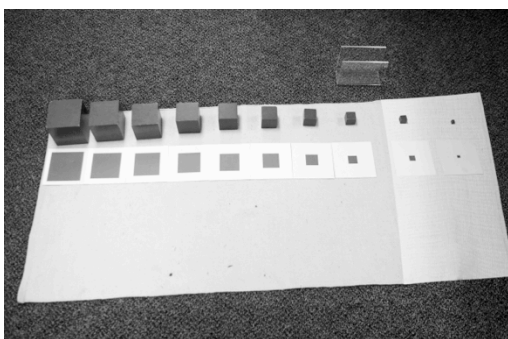
Teach Patterns



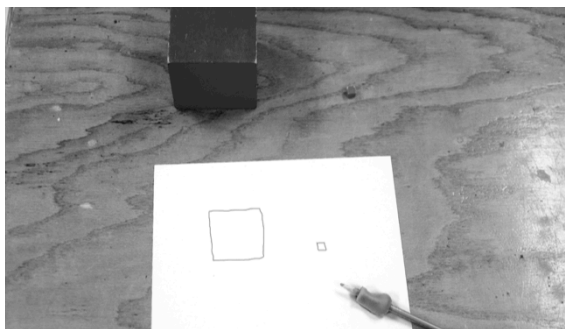
The At Risk Child Requires:

Perceptual discrimination from three dimensions to paper and pencil.

Perceptual Discrimination



Perceptual Discrimination



Montessori Applied to Children at Risk

- ✓ Specific techniques for increasing **gross motor skill** development, **eye-hand** coordination and **fine motor skill** facility

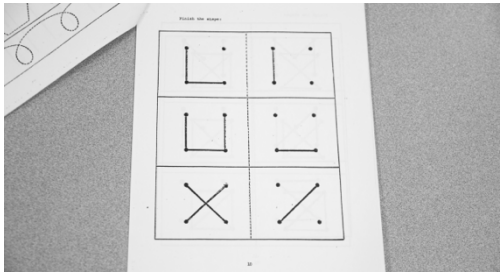
Montessori Applied to Children at Risk

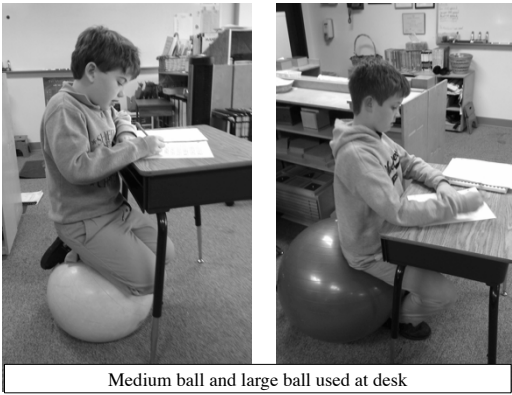
- Recognition of need for more movement for students with attention difficulty (use of OT equipment)
- Teach Perceptual Motor Skills on the line and outdoors
- Attention to grasp of manipulatives in Practical Life, Sensorial, Math, Language and Cultural
- Use of metal insets to improve Fine Motor Skills

Fine Motor Skill



Prewriting

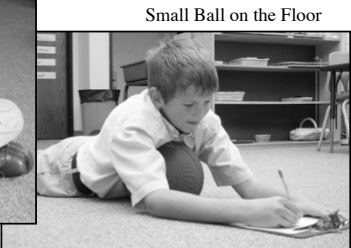




Medium ball and large ball used at desk



Small ball used on the line.



Small Ball on the Floor

Montessori Applied to Children at Risk

- ✓ A concentration on the specific labels for people, objects, and ideas and their attributes and functions that foster **oral language development**

Oral Language Development

- Awareness of the importance of language expansion after the initial presentation (name of the activity, name of objects used in the activity).
- Add vocabulary categories available in the classroom by the addition of an oral language development shelf.



Oral Language Development Body



Oral Language Development Categories

- Body
- Family
- Clothing
- Home
- Community
- World Regions
- Animals
- Plants
- Food
- General Language Concepts
- Holiday Language
- Classroom Language

Oral Language Activity



Written Language

- Combine Montessori Language with the therapeutic strategies of a Multisensory Structured Language Education Approach (MSLE) - Orton Gillingham based.
- Teach word patterns - simple to complex.
- Reduce difficulty of presentation (controlled worked building vs complete moveable alphabet)

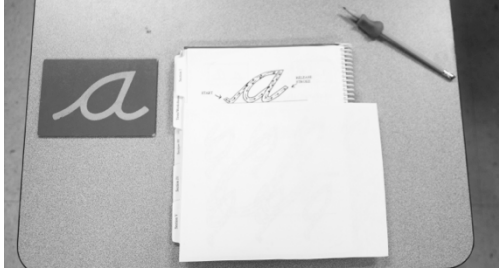
**Facilitating Learning For The
At Risk Child
Written Language Development**



Written Language Activities











Sequential English Education (SEE)

SEE is a Multisensory Structured Language Education program.

SEE combined with Montessori language instruction teaches reading, spelling, handwriting, written expression and includes literacy exercises.

The Shelton MSL Training Course in SEE is accredited by IMSLEC and IDA



SEE

The lesson includes these activities:

- Introduction of each sound in a structural linguistic multisensory approach-a,t,p,h,c,n,l,b,f,s,g,m,j,r,v,d,i,k,w,wh,z,th,u,sh,e,y,ch,q,o,x
- Decoding with moveable alphabet by word family-patterns limited, one vowel at a time
- Moveable Alphabet reduced in difficulty for word building

SEE

- Patterns taught from simple to complex-CVC words with consonants, consonant digraphs, consonant blends, long vowels with the final e pattern, other long vowel combinations, vowels with l/r, multi syllable words, morphology, syntax, semantics

The Shelton MSL Training Course in SEE is accredited by IMSLEC and IDA

See Lesson



Montessori Applied to Children at Risk

- ✓ Enhancement of Social Skills and Interpersonal Relationships
- ✓ Direct teaching of social values (honesty, compassion, cooperation, self control, etc.) and social skills (non verbal/verbal communication, stop, think, choose reasoning, specific stories and role plays)

Choices



Montessori Applied to Children at Risk

- ✓ An environment of encouragement to try, a de-emphasis of failure, which encourages the child's desire for independence, an emphasis on respecting the teacher and classmates that fosters consideration for others
- ✓ More validation (that is correct, recognition of effort, recognition of student's feelings of pride in accomplishment)

Environment of Encouragement





Respecting Each Child's Learning Differences Part III

JOYCE S. PICKERING, HUM.D.
AMY KELTON

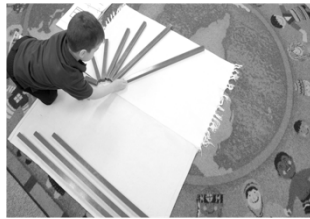
JUNE SHELTON SCHOOL
15720 HILLCREST RD
DALLAS, TEXAS 75248
WWW.SHELTON.ORG



J. McVicker Hunt has written that Montessori has come the closest to solving the problem of “match” in education. (Hunt 1968). He explains the “match” concept as placing the level of presentation to the child at the child’s developmental and skill level for optimal learning and success. This problem of “match” is critical to teaching the at risk child.

Models of Support Programs for LD Children in Montessori Schools

- Who are the at-risk and LD students?
- Who will we serve?
- Who not?



Models of Support Programs for LD Children in Montessori Schools

- How to identify? Referral/Screen
- How best to serve student population we already have?



REFERRAL

- Parent Checklist
- Montessori Teacher Checklist
- Referral Form For Students 8 Years Of Age And Older

ASSESSMENT

- Mental Ability
- Perceptual Ability
- Language Ability
- Academic Skills
- Behavioral Checklist
- ADD Checklist
- Quotient AD/HD

MENTAL ABILITY

- Slosson Test Of Intellectual Ability In Children And Adults
- Can Be Administered By Teachers Information On Verbal, Performance And Memory Skills
- WISC-5 - Administered by a psychologist or educational diagnostician
- Woodcock Johnson Tests of Cognitive Ability (WJIV)

PERCEPTUAL ABILITY

- CTOPP-Phonological Awareness / Rapid Automatic Naming
- Berry-Test Of Visual Motor Perception
- Can Be Administered By Teachers And Gives Auditory And Visual Processing Skills

LANGUAGE

- Clinical Evaluation of Language Function
- Speech- Test of Articulation
- Administered by a Speech Language Pathologist

ACADEMIC ABILITY

- Gates Oral Subtests
- Gilmore/Gray Oral Reading
- Alphabet Sample/Spontaneous Writing Sample
- Wide Range Achievement Test - Math
- Woodcock Johnson - Math
- Administered by teachers with training

Models of Support Programs for LD Children in Montessori Schools

How do we set up a support team and Resources for the Classroom Teacher?



SUPPORT TEAM

- Administrator
- Representative From Each Level - EC, Elem, MS, HS
- Parent Reps
- Special Personnel (LD Specialist)
- Speech Language Pathologist, Etc.

ADMINISTRATIVE SUPPORT

- Admission Criteria
- Support In Parent Conferences
- Training
- Scheduling
- Materials
- Educating The Board

Models of Support Programs for LD Children in Montessori Schools

How will we inform/train our staff?



TRAINING SEMINARS

- Overview Of Learning Differences And Related Disorders
- Montessori Applied To Children at Risk/ LD And Related Disorders
- Understanding Assessment Reports
- Multisensory Structured Language Education (MSLE Training)
- Organization and Study Skills
- Social Skills

“The mindset of the effective educator is motivated to help all students to feel special and appreciated.” “We accomplish this by being empathic, by treating students in the same ways that we would like to be treated, by finding a few moments to smile and make them feel comfortable, by teaching them in ways they can learn, by taking painstaking care to avoid any words or actions that might be accusatory, by lessening their fears of failure, by encouraging them, and by recognizing their strengths.”

Quote By Robert Brooks, Ph.D.

Montessori Applied To Children At Risk For Learning Differences

MACAR

Shelton School in Dallas, Texas
JULY 6-14, 2017 (no class on Sunday)

MACAR - Helps the Montessorian understand the **specific needs of children diagnosed with Learning Differences** and provides specific strategies for matching the Montessori educational method to those needs.

Materials provided electronically and include:

- ◆ Administrative Manual
- ◆ Practical Life
- ◆ Sensorial
- ◆ Math
- ◆ Oral & Written Language
- ◆ Choices
- ◆ Perceptual Motor Skills

www.shelton.org/MACAR

Sequential English Education (SEE)

Training educators for teaching reading, writing, comprehension, spelling, auditory discrimination and memory.

SEE Teaching Level - June 5 -10, 2017
SEE Therapy Level - June 12 - 16, 2017

This program is designed for individuals 5 years of age through adults. It can be taught individually or in small group settings.

The Shelton MSLE Training Course in SEE certificate provides eligibility for taking the Alliance Exam and upon successful completion, ALTA certification.

Shelton.org/SEE

Coming in Early 2017 Using Montessori Strategies for Children With Learning Differences

Joyce S. Pickering & Sylvia O. Richardson

This book includes a history of the development of preschool education, an overview of the Montessori Philosophy and curriculum, assessment of learning differences and other exceptionalities, Montessori strategies applied to children At Risk for Learning Difference, Communication Disorders, Intellectual Differences, and the Autism Spectrum. In addition using Montessori strategies in the classroom and in the home are presented.



Joyce and four of her Montessori grandchildren