

# **Inclusion - Respecting Each Child's Learning Differences**

**Joyce S. Pickering, Hum.D.**

# Mapping the Mind

## Frontal Lobe

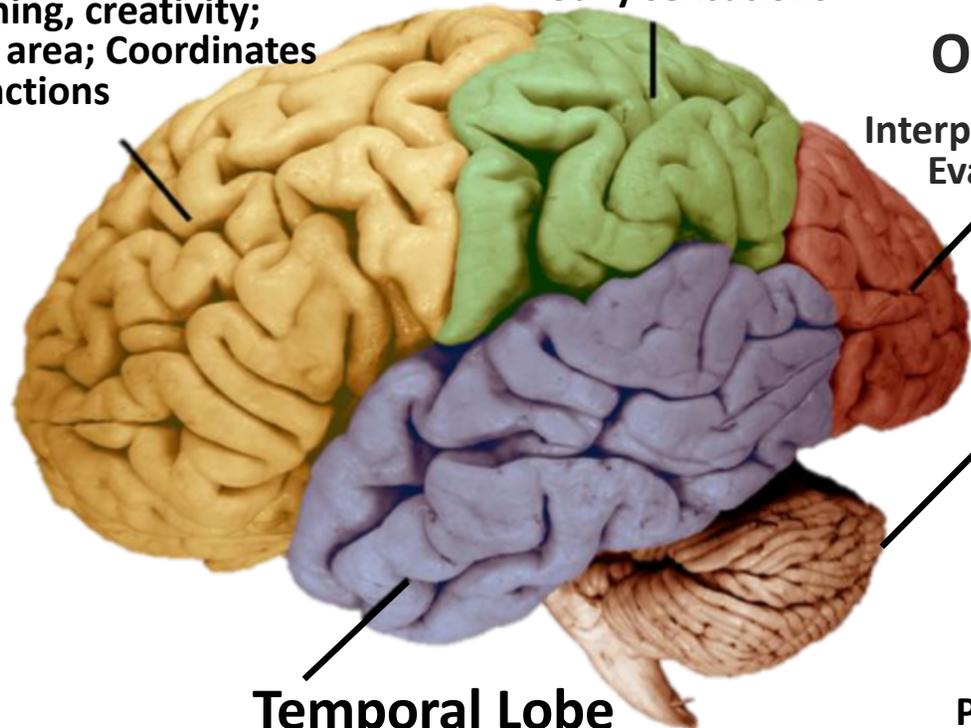
Thinking, planning, creativity;  
Primary motor area; Coordinates  
other brain functions

## Parietal Lobe

Bodily sensations

## Occipital Lobe

Interpret visual images;  
Evaluation of pieces



## Cerebellum

## Left Hemisphere

Processes language skills

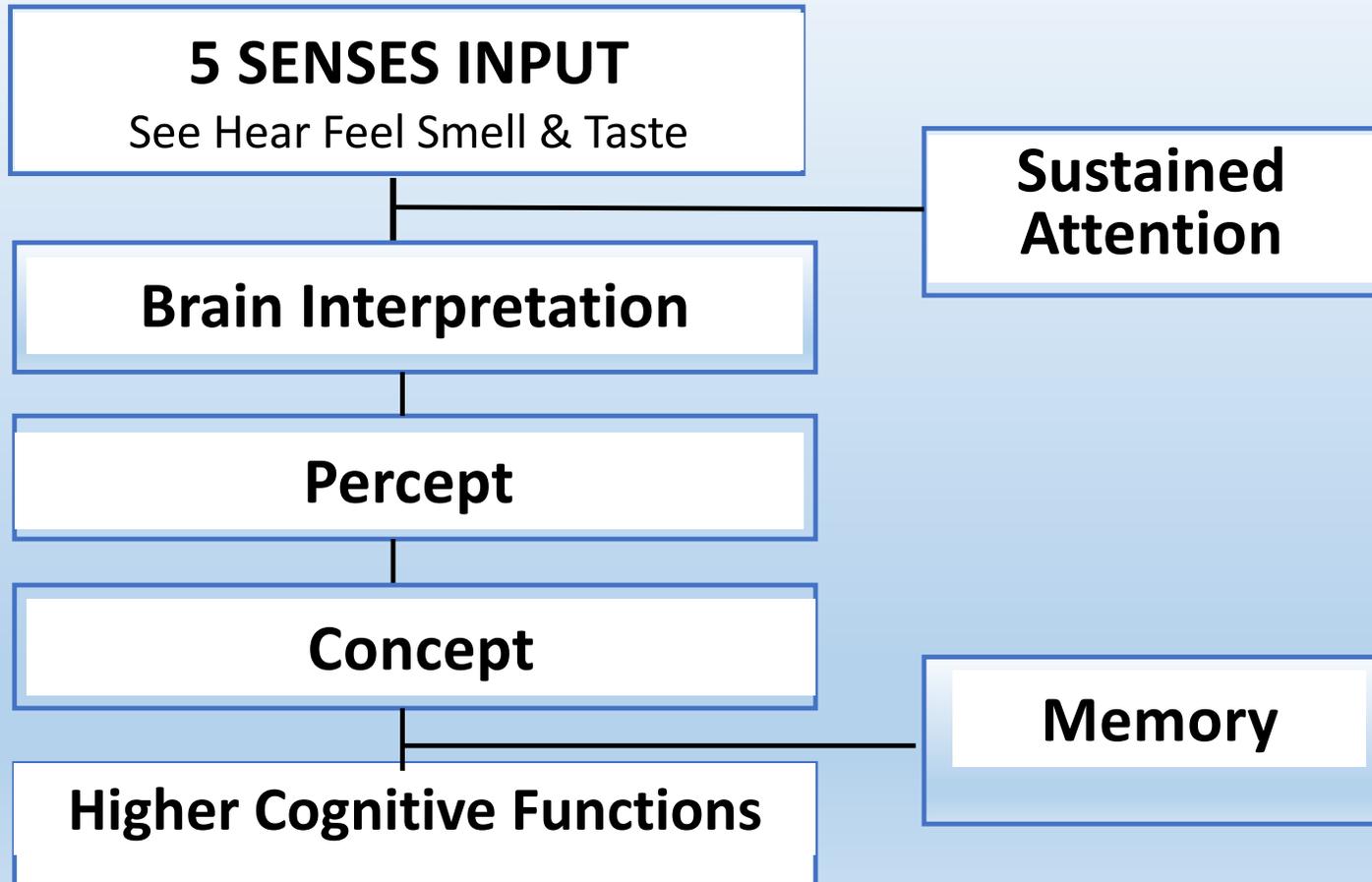
## Temporal Lobe

Interpret auditory signals

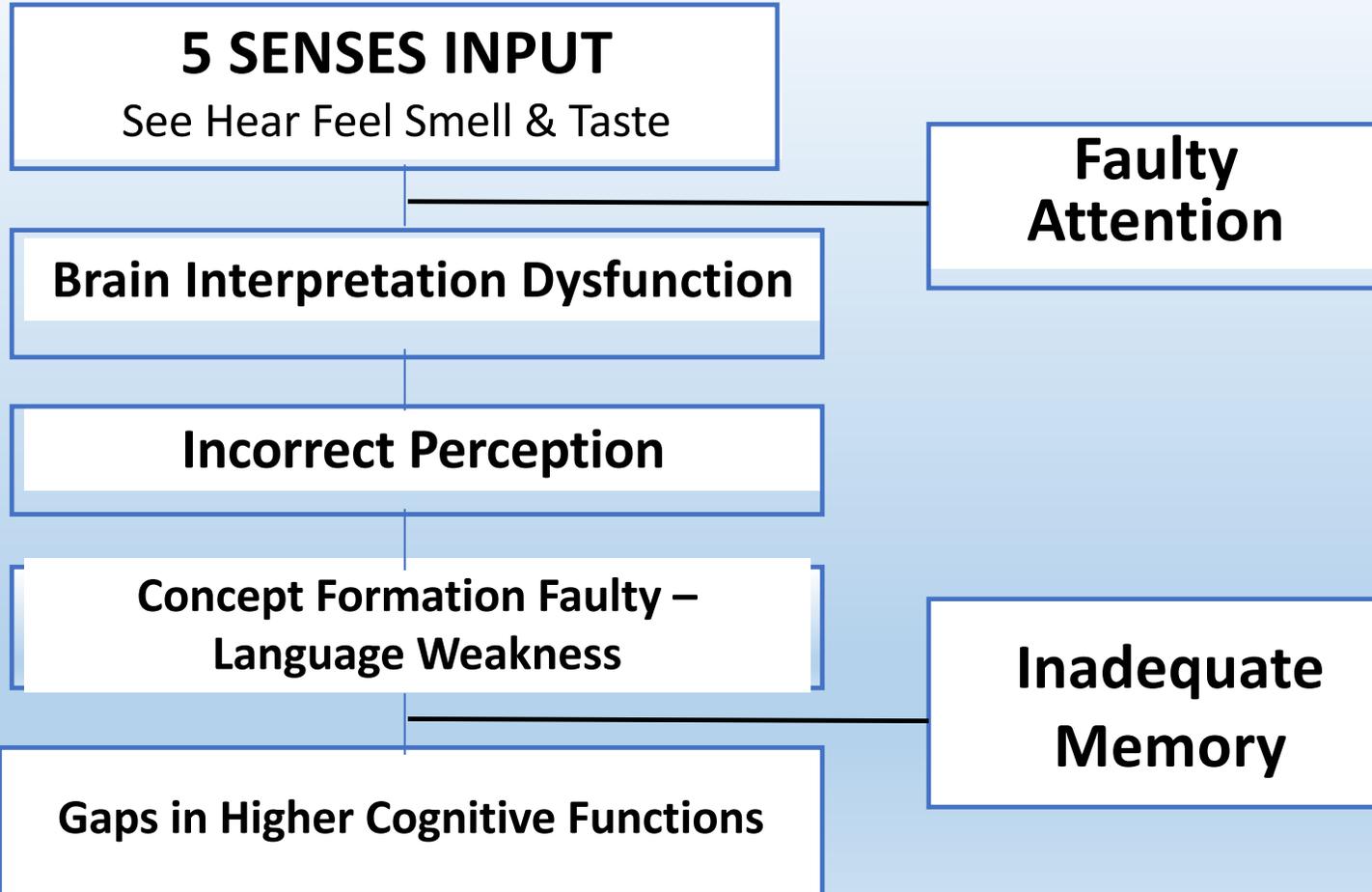
## Right Hemisphere

Processes spatial information  
& abstract thoughts

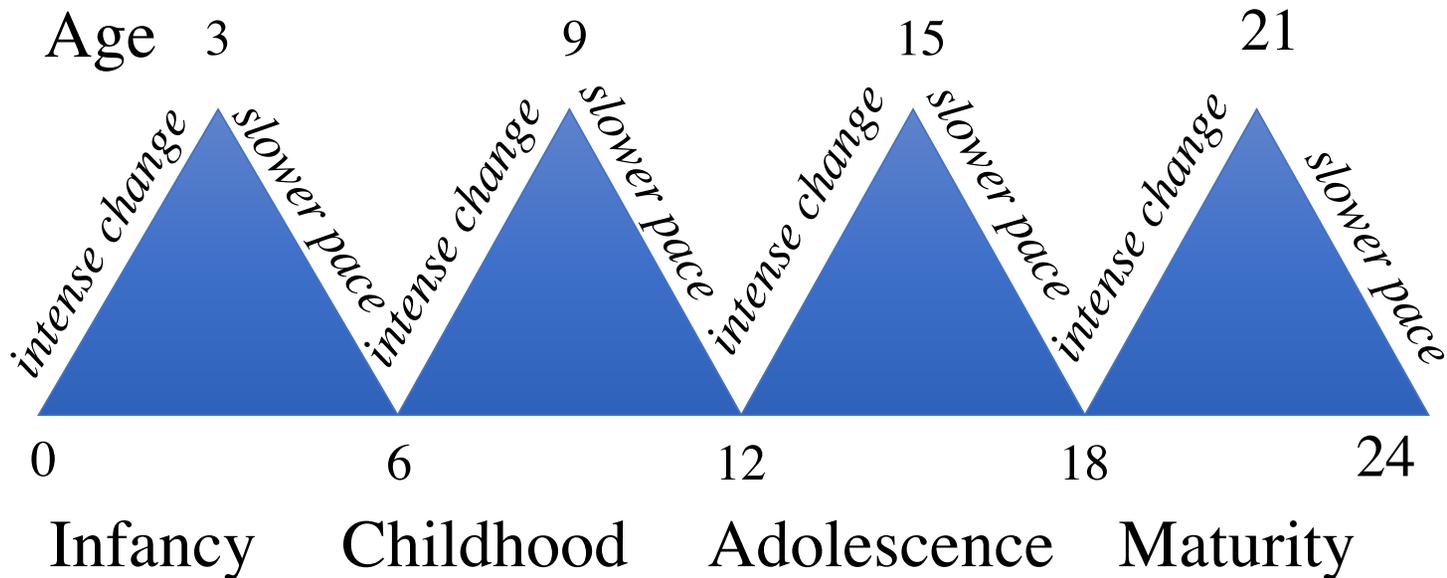
# PROCESSING CHART



# PROCESSING WITH DYSFUNCTIONS

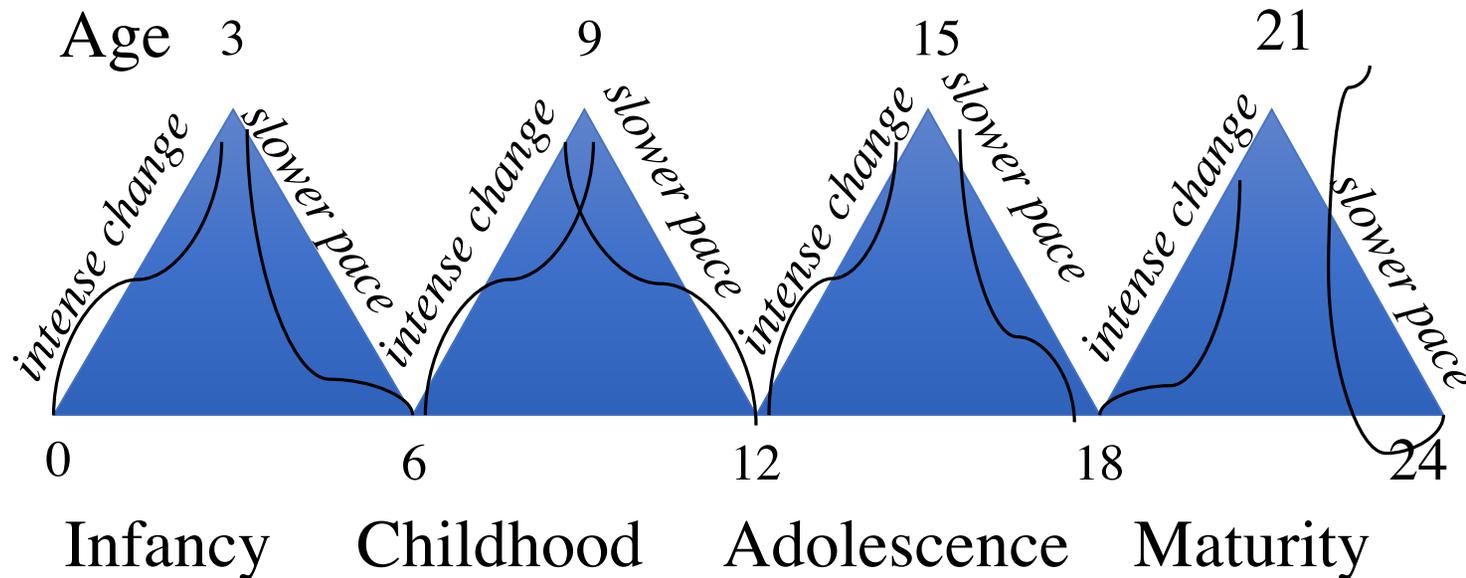


# Four Planes of Development



“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  
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Maria Montessori

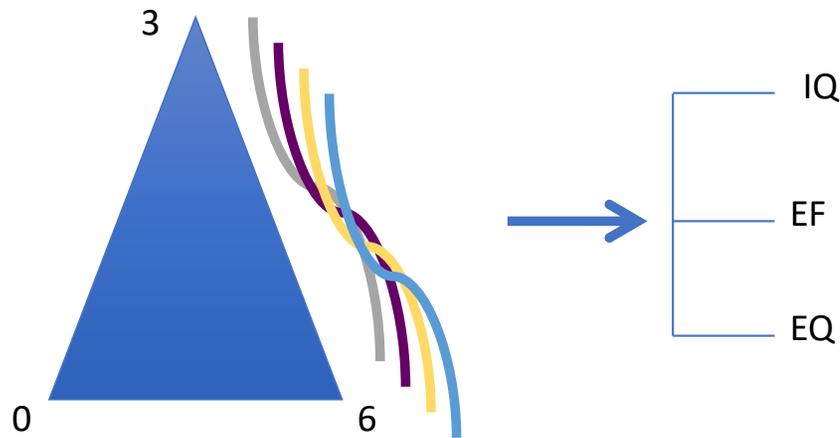
These deviations . . . “can only be corrected when all the powers are functioning as one to serve the ends of the whole individual.”

# 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*

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 - 1<sup>st</sup> 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 <sup>1/2</sup> 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, 5<sup>th</sup> Edition (5.0+)
- Gates Oral Spelling (5.0+)
- WRAT – Math (5.0+)

# Full Evaluation

- Background History
- Cognitive Ability
- Oral Language Ability
- Phonological Processing
- Letter-Sound Knowledge
- Automaticity/Fluency
- Word Recognition
- Decoding
- Reading Comprehension
- Spelling
- Written Expression
- Fine Motor
- Working Memory
- Attention
- Executive Functioning
- Processing Speed

**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.

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## **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.

# 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**

# 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

## 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)

## **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**



## 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

# The At Risk Child Requires:

- Guidance in selecting and performing tasks



### Weekly Contract

Name \_\_\_\_\_ Date \_\_\_\_\_

<b>Works</b>	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
<b>Practical Life</b>					
<b>Sensorial</b>					
<b>Math</b>					
<b>Language</b>					
<b>Cultural</b>					
<b>Computer</b>					

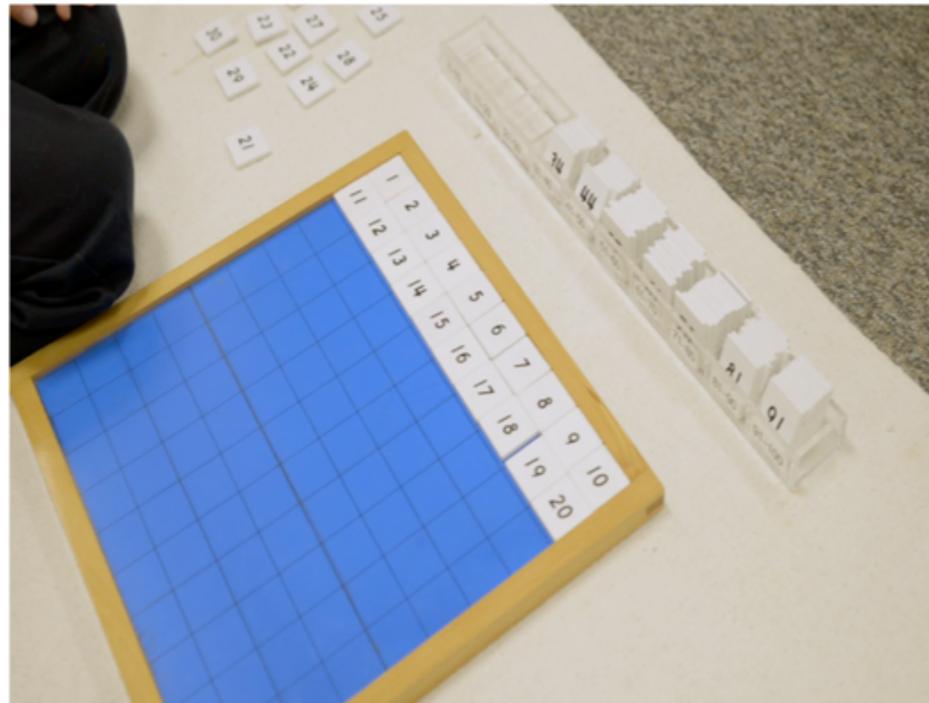
## Facilitating Learning For The At Risk Child

- 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)

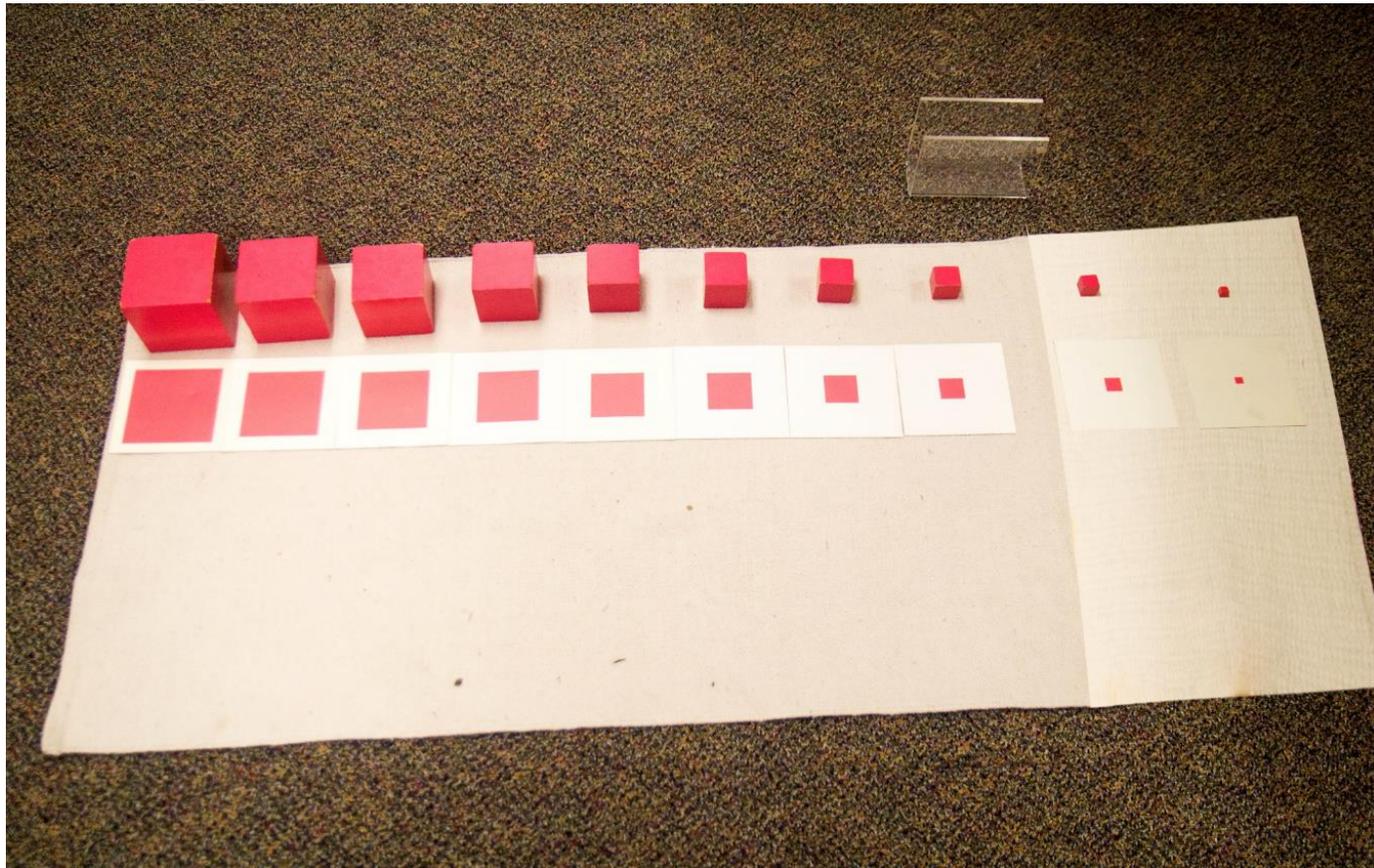
# Manipulative Materials



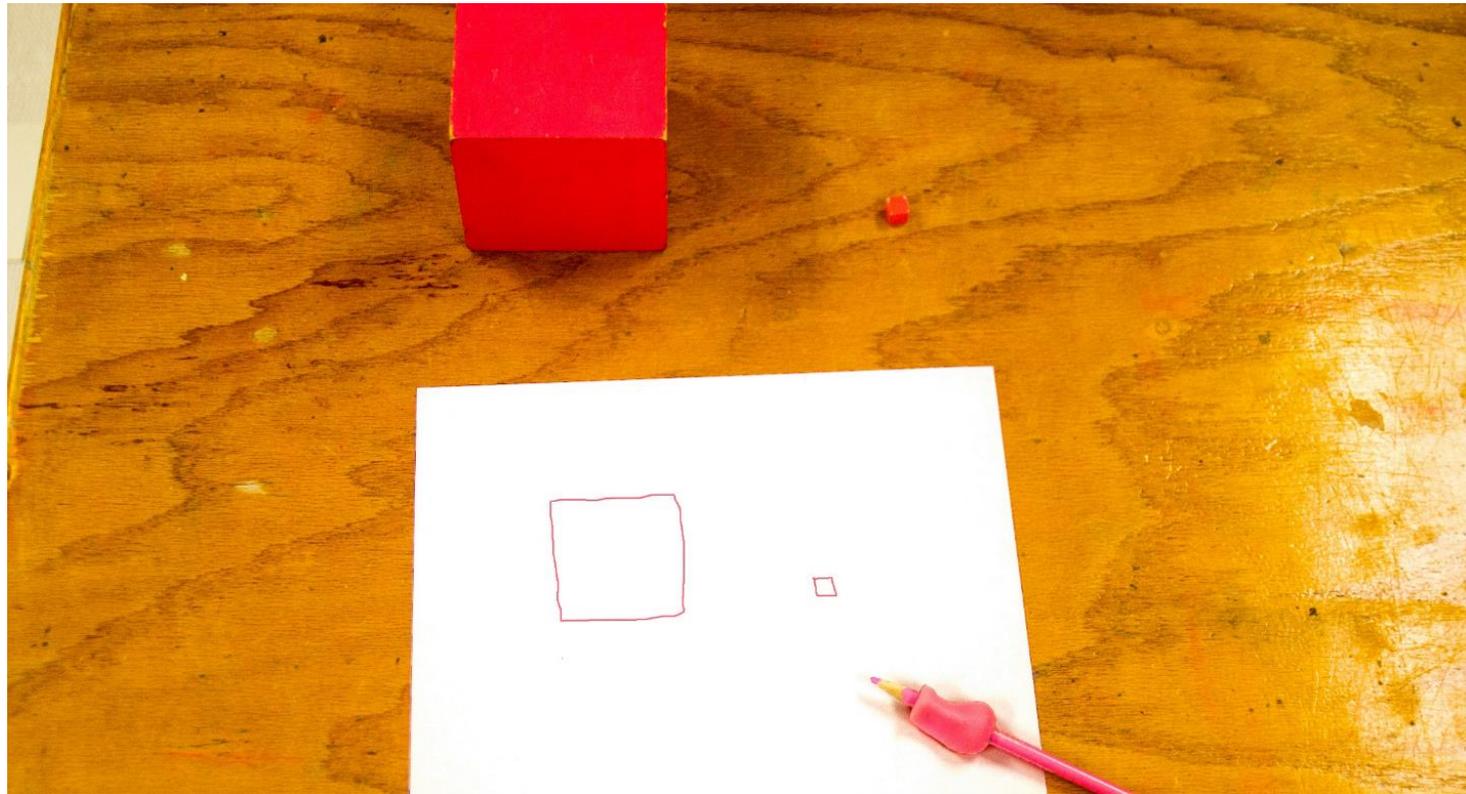
# Teach Patterns



# 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

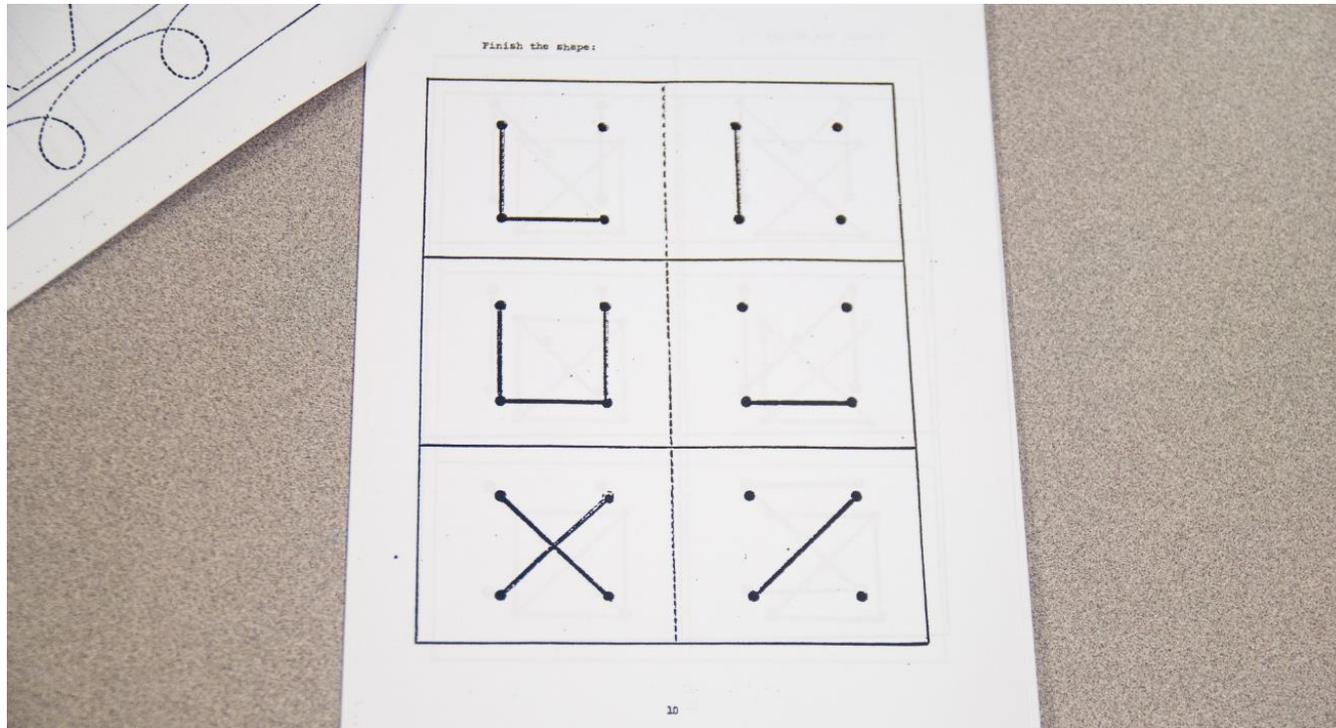
# Montessori Applied to Children at Risk

- 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



# 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 Categories

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

# Oral Language Activity



## Social Skills

- ✓ 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)

## Social Skills continued

- ✓ 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)

# American Montessori Society

## Montessori Inclusion Endorsement (MIE)

### **What is the MIE?**

- The Montessori Inclusion Endorsement creates a means to support children with diverse learning needs and rests strongly on Dr. Montessori's philosophy to provide a learning environment for all children, regardless of their needs.

## MIE - Who is eligible for the endorsement?

- Montessori credentialed teachers at all levels (Infant/Toddler, Early Childhood, Elementary and Adolescent) may apply. The candidate will have a minimum of: A bachelor's degree, and AMS-recognized credential at any level, and a minimum of three year's teaching experience in a Montessori environment after receipt of their credential. AMS recognized credential includes AMS, AMI, NCME and MACTE recognized Montessori certification.

## What are the MIE course requirements?

- The teacher education course will have a minimum of 178 academic hours, which will be delivered as a residence course or a blended residence and distance-learning course.

- The endorsement course will include field experience hours associated with specific academic courses.
- There are 10 hours supervised field experiences.
- The practicum will take place in an inclusive Montessori classroom, which is defined as having at least one child who has a documented disability or is being identified. The practicum period is 16 consecutive weeks with at least 4 times for discussion and guidance.

## When will training centers begin offering this program?

- As with any AMS teacher education course, the centers will develop the Montessori Inclusion Endorsement course and submit it to AMS for approval.

“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.

**Laws** concerning services for individuals with dyslexia and other disabilities.

## **Types Of Evaluations**

### **Public School Testing**

- Students with learning differences and/ or related disorders are served in either general ed (ADA/504) or special ed (IDEA).

- **Dyslexia is usually first served under 504** after a process of screening/identification.
- If difficulties are significant enough, the dyslexic student may eventually be served in special education under Specific Learning Disability.

## 3 Methods of Qualifying For Special Ed

- IDEA 2004 federal regulations define **SLD** as “a disorder in one or more of the basic psychological processes.”
- Historically, **3 methods** have been used to identify.
  - IQ-Achievement Discrepancy model
  - RTI
  - “Alternative Research-Based Procedure”

# 13 Qualifying Categories for Special Education

- **Autism**
- Blindness
- Deafness
- **Emotional Disturbance**
- Hearing Impairment
- Intellectual Disability
- Multiple Disabilities
- Orthopedic Impairment
- **Other Health Impaired**
- **Specific Learning Disability**
- **Speech or Language Impairment**
- Traumatic Brain Injury
- Visual Impairment

# Private Testing

- Diagnose using DSM/ ICD codes.
- If results don't meet full criteria for a diagnosis, weaknesses can be identified and appropriate intervention recommended.
- Multiple types of batteries are possible.
- Evaluations are comprehensive. The SEC typically assesses a combination of cognitive ability, oral language, auditory processing or phonemic awareness, academics, memory, emotional functioning, fine motor skill, visual-spatial ability, executive functioning, behavior, and social communication.
- For further information see Chapter 23 - Rights of Individuals with Dyslexia and Other Disabilities - in the book Multisensory Teaching of Basic Language Skills, (3<sup>rd</sup> edition) Judith R Birsh, Ed. D. Brookes Publishing, 2011.

# Collaboration between Montessori and Special Education Professionals

- I. Ideal Situation - Specialist is trained in Montessori Education
- II. Specialist receives a course like MACAR to understand the Montessori Philosophy Curriculum and how it is applied to students with varying exceptionalities.

III. The specialist is given a Montessori book reading list to complete before beginning collaboration with the Montessori teacher.

The Montessori teacher and the specialist have sufficient time to meet and plan their collaboration before the specialist begins to work in the Montessori classroom and regular ongoing meetings are scheduled.

**Reading List Suggestions:**

1. Montessori: The Science Behind the Genius by Angeline Stoll Lillard (2017)
2. Using Montessori Strategies with Children at Risk for Learning Differences by Joyce Pickering (Coming Soon)

# Inclusion Sessions

## Friday, March 23

**8:00 AM - Joyce S. Pickering**

Inclusive Practices: The History of  
Montessori as a Pedagogical Model

**2:00 PM - Brenda Huth**

Special Needs Differentiation in the Early  
Childhood Classroom

**4:00 PM - Casey Barnett**

Differentiated Montessori Instruction for  
Students with Learning Differences

## Saturday, March 24

**8:00 AM Pauline Novak**

Classroom Management in an Inclusive  
Montessori Environment

**2:00 PM Ann Epstein, Pam Shanks**

Strategies & Tools for Inclusion

**4:00 PM Gideon M. Smith**

Inclusion for Secondary Students with  
Learning Exceptionalities

## Sunday, March 25

**10:15 AM Nancy Lindeman, Duna Strachan**

Inclusion from Birth