How Are We Supporting Our Teachers And Our Students With Special Needs In The Montessori Classroom?



JOYCE PICKERING, HUM.D. JUNE SHELTON SCHOOL 15720 HILLCREST RD DALLAS, TEXAS 75248 WWW.SHELTON.ORG

June Shelton School & Evaluation Center

- Founded April 2, 1976
- Students with learning differences preschool through grade twelve
- Comprehensive curriculum with strong academic orientation
- Supportive environment, stressing multisensory learning techniques
- Accredited by Independent Schools Association of the Southwest (ISAS)
- Member of Southern Association of Independent Schools (SAIS)



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.

Definition of Language Learning Differences

Language-learning differences are the result of auditory and visual processing dysfunction and include:

- the specific language disorder, dyslexia,
- and the related disorders of ADHD,
- specific math disability,
- specific written expression disability,
- specific oral language disorder, and
- developmental motor disorder.

Dyslexia Definition Adopted by 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)













Dr. Gordon Sherman

"While no two brains are alike, the brains of people with dyslexia are distinctively different compared to those without dyslexia."



Neural Migration

- Occurs before the 6th month of gestation
- A genetic code sends the signal to migrate
- In non-impaired learning brains the neurons do not reach the first layer of cerebral cortex-the language center of the brain

Dr. Gordon Sherman



















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 314.01

Essential features

- Developmentally inappropriate degrees of
 - inattention,
 - impulsiveness,
 - hyperactivity.



ADHD Individuals Benefit From:

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

Dr. Edward Hallowell Driven to Distraction

Assessment

- Parent Questions
- Teacher Questions
- Mental Ability
- Perceptual Ability
- Pre-academic / academic skills
- Behavioral Checklist



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

How Do We Treat Learning Differences?

Treatment

Remediation + Montessori

- Organization/Study Skills
- MSL Reading Approaches Language Therapy
- Multisensory Teaching
- Cooperative Learning
- More Individualization

Treatment

Accommodations:

- Untimed Tests / Extended time on written assignments
- Assistive Technology computers, books on tape, tape recorders

Treatment

Non-medication

- Direct teaching of attention skills
- Cognitive Strategies
- Exercise and Diet

Medication

- Stimulant Medications Ritalin, Dexadrine, Adderall, Concerta
- New Class of Medication Strattera, a selective norepinephine reuptake inhibitor
- Mood Medications Paxil, Prozac, Wellbutrin, Zoloft

Positive Effects

- 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 Can We Observe In Preschool Children That Would Alert Us To At Risk Characteristics?

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

Coordination

- Gross
- Fine
- Life Skills



Oral Language

- Receptive (understanding)
- Expressive (producing)
 - Speech (articulation)
 - Morphology (roots / affixes)
 - Syntax (order / grammar)
 - Semantics (*meaning*)
 - Voice (quality)
 - Fluency (smooth production)



- - Composition

Attention

- Motor Skills
- Practical Life
- Sensorial
- Silence Game





Varying Exceptionalities

Learning Differences

- Dyslexia
- ADHD
- Oral Language Disorders

Learning Differences

• 15-20% of the population

Dyslexia

- Reading Decoding
- Spelling
- Written Expression

ADHD

- Inattentive Type
- Hyperactive Type
- Combined Type

ADHD

• 5.7% of the population

Oral Language Disorder

• Inability to associate meanings to words

Learning Differences

DIFFICULTIES RELATED TO LD

- Motor Delays or Disorders
- Speech-Language Delays/Disorders
- Social Skill Deficits
- Organization and Study Skills Deficits
- Dysgraphia (handwriting incoordination)

Intellectual Deficit

• Generalized disorder appearing before adulthood characterized by significant impairment cognitive functioning and deficits in 2 or more adaptive behaviors.

Intellectual Disability

- 2-3% of the population
- 75-90% Mild ID
- 25% genetic

Intellectual Disability

- Delays in Language Development
- Deficits in memory skills
- Difficulty with social rules
- Difficulty with problem solving
- Delays in adaptive behavior
- Lack of social inhibitors

Intellectual Disability Types

- Syndromic Intellectual Disabilityintellectual deficits are associated with medical and behavioral signs and symtoms
- Non Syndromic Intellectual Disabilityintellectual deficits without other abnormalities(30-50%)

Intellectual Disability IQ Categories

- 50-69 Mild-not obvious in early years/can learn to read and do math to approximately the 9-12 year old level/can be trained to do a job and live independently
- 35-49 Moderate-apparent in infancy/can learn health and safety rules/live with parents or in a group home
- Below 35-Severe-needs help entire life

Intellectual Disability Causes

- Down Syndrome · Most frequent
- Velocariofacial Syndrome
- Fetal Alcohol Syndrome
- Genetic Conditions
- · Problems during pregnancy
- Problems during birth
- Exposure to certain diseases/toxins(meningitis,measles/lead)
- Iodine Deficiency
- Malnutrition
- Absense of Arcuate Fasciculus

Down Syndrome

• Down Syndrome is a genetic condition in which a person has 47 chromosomes instead of the usual 46.

Down Syndrome

- Discovered by Dr. John Langdon Down
- Dr. Jerome Lejeune-3 copies of chromosome 21/not 2

Down Syndrome

- Cause unknown
- 80% born to mothers under 35/ chances increase with age of the mother
- 1 in 691 live births/1 in 1087 in 1990
- Population in the US estimated at over 400,000

Down Syndrome

- 39.4% of DS-mild ID 50-75
- 1% Borderline 70-80

History of Terms

- Cretain "still Christian" "still human"
- Amentia difficulty in mental functioning early in life/Dementia-later
- Idiot-mental age 2 years or less(profound)
- Imbecile-less extreme-moderate to severe
- Mongolism-medical term for Down Syndrome-removed in 1960

History of Terms

- Educable 50-75
- Trainable below 50
- Retarded Latin-to make slow, delay

Autism

• Autism Spectrum Disorder is a developmental disorder that appears in the first 3 years of life and affects the brain's normal development of social and communication skills.

Autism

- Associated with motor, attention sleep and gastrointestinal difficulties/in some with ID
- 1 in 68 on Autism Spectrum
- 4-5 times more likely in males
- Over 2 million in the US

Autistic Savant

• An Autistic person with unusual abilities in a specific area of knowledge (math, 3 dimensional visual perception, computers)

Autism

• Caused by a combination of Autism risk genes and environmental factors influencing early brain development.

Montessori on Varying Exceptionalities

• Montessori 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 proceed this one.

Montessori for the Intellectual Disability

Maria Montessori stated that once she was able to present the cylinder blocks to the retarded child it was necessary to continually recall his attention.

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 deficients makes education possible, while with normal children it provokes autoeducation."

Maria Montessori The Montessori Method

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









A method which provides for:

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



- ✓ Specific procedures / techniques for training attention
- ✓A classroom structure, clear in limits and privileges, which assists the child with faulty inhibition control to develop those skills





✓ 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



Montessori Applied to Children at Risk

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





 ✓ Specific techniques for increasing gross motor skill development, eyehand coordination and fine motor skill facility

Fine Motor Skill

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



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





✓ Enhancement of Social Skills and Interpersonal Relationships



✓ 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



What Else Does The Montessorian Need To Know To Help The At Risk Child?

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)







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 I/r, multi syllable words, morphology, syntax, semantics

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

See Lesson





Facilitating Learning For The At Risk Child

- Oral language emphasis
 - Use short repeated phrases
 - Use rhythm
 - Use multisensory reinforcement for memorization
- Organization must be taught
 - Use of space-control charts/placement guides
 - Directionality left to right carefully stressed/tactile & kinesthetic reinforcement
 - Sequence first, second, third
- Attention equal responsibility of student & teacher

The At Risk Child Requires:

• Teacher is present in their learning environment for greater time periods



The At Risk Child Requires:

• Direct assistance on attention, focus, and concentration





The At Risk Child Requires: • Structure for behavior



The At Risk Child Requires:

• Guidance in selecting and performing tasks













Date:	04/04	04/06	04/06	04/07	04/08	1
	MON	TUES	WED	THURS	FRU	NOTES
MATH 2+						
Facts Sheet						
Yellow/Green Book			1			-
Montessori Math +, -, X,						
S Money Work S Fractione / Cleck						
Geometry			1			
LANGUAGE 3			1			1
Language Therapy		1				1
B.E.E. / AP Writing Mechanics Drawers M, N, O			-			
Cepitalization						
* Journal						Delly.
Novel Study		FALLER LER LER LER LER LER LER LER LER LER				
Comprehension SRA Europe Travels Explode Code New Practice Readers						1
Grammara						
CULTURAL 3						
Science Biomes of Europe						
History Days/Month*						Etymology*
Europe Country Research						
Computer Class Social Skills Library						
PT/ OT /Speech						

The At Risk Child Requires:

• Perceptual discrimination from three dimensions to

paper and pencil



The At Risk Child Requires:

• Specific and direct oral language development









The At Risk Child Requires:

• Language presentations modified with the techniques or programs for children with specific reading disabilities





SUMMARY & CONCLUSIONS

The At Risk Child Requires:

- Direct teaching of language and/or math symbols
- Pre-writing & writing practice with a multi-sensorial technique
- Language presentations modified with the techniques or programs for children with specific reading disabilities





Results of Lack of Early Intervention

- Untreated disorders of articulation become ingrained habits
- A lack of vocabulary becomes more severe communication disorders

Results of Lack of Early Intervention

- Visual/auditory processing disorders result in mild to severe written language disorders (reading, writing, spelling)
- Non Verbal/verbal communication deficits often causes difficulties with social skills

 If a parent or teacher waits for the child with a language disorder to spontaneously develop the skills for which he does not have the discrimination & integration abilities, it means the child struggles with confusion & frustration.



Education Must Be Prescriptive

Many approaches/programs could work with most children to some degree, but it is more effective if we match the program to the child and his individual profile of strengths/weaknesses in the assimilation of language and learning.



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.

Self-Concept Formation

- The child with average learning skills has more positive than negative experiences both before entering school and after entering school
 - This builds resistance to anxiety
 - Establishes a strong sense of self worth

Self-Concept Formation

- The child with learning or adjustment difficulties has more negative than positive experiences, *especially* after entering school
 - This exacerbates feelings of anxiety
 - Self-concept is negatively affected
 - Negative behaviors develop

A vicious circle of negative behavior is set into motion

- Adults must intervene to stop the cycle
- The possibility of more positive experiences must be increased
 - Improve academic skills
- Direct teach social skills/coping strategies
- Provide success experiences in and out of the academic setting

For further information about trainings and materials, please visit the Shelton website www.shelton.org/training





Shelton School in Dallas, Texas JULY 6-14, 2016 (no class on Sunday)

Montessori Applied To Children At Risk For Learning Differences MACAR

MACAR is designed to assist the Montessori teacher to serve students with learning differences in the regular classroom.

Materials provided electronically and include:

- Administrative Manual
 Practical Life
 Sensorial
- ♦ Math
- Oral Language/Written Language
 Choices
 Perceptual Motor Skills

www.shelton.org/MACAR