

# Complex Learners: Strategies that Promote Academic and Social Success

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# Objectives:

- Identify and discuss characteristics of complex learners
- Identify possible contributing factors that affect academic and social emotional growth
- Identify practical solutions for the classroom for increased participation, organization and attention

# Characteristics of a Complex Learner:

## Reading

- Poor phonological and phonemic awareness skills
- Difficulty correlating letter sound patterns
- Difficulty remembering sight words
- Poor comprehension
- Limited understanding of vocabulary
- Not using reading strategies
- Poor fluency
- Difficulty recalling letters

# Characteristics of a Complex Learner:

## Math

- Poor visual perceptual skills
- Poor sequencing of letters/numbers
- Confuses arithmetic signs
- Difficulty retrieving arithmetic facts
- Difficulty with spatial alignment of work
- Difficulty with concepts of time/direction

## Writing

- Poor handwriting skills; difficulty using pencil and scissors
- Resistant to writing
- Poor organization
- Inability to write words with proper size and alignment
- Difficulty initiating ideas
- Difficulty with spelling

# Characteristics of a Complex Learner:

## **Social Emotional**

- Difficulty following directions
- Sad/Anxious
- Difficulty with routines (school and home)
- Does not want to go to school/school refusal
- Has poor grades or difficulty completing homework
- Rigid/Resistant
- Difficulty keeping up with peers
- Limited friends/No friends
- Teases or gets teased
- Bullies or gets bullied
- Needs to be picked up often from school

# Possible Contributing Factors: Language

## Receptive Language

- Vocabulary
- Grammar
- Morphology
- Syntax
- Semantic
- Sequential information processing
- Integration of information

## Expressive Language

- Intention vs expression
- Retrieval and accessing
- Word usage
  - Phonemic
  - Semantic
- Syntax



# Possible Contributing Factors: Language

- Social Pragmatics/Social Thinking
  - Verbal
  - Non-verbal
  - Paralinguistics
  - Theory of Mind - Perspective Taking

# Possible Contributing Factors: Occupational Therapy

## **Sensory Processing:**

- Difficulty with transitions
- Plays rough with peers
- Chews on pencils/shirt/pen
- Covers ears in loud noises/  
distracted by sound
- Avoids loud or crowded  
environments (cafeteria,  
recess)
- Moves all the time/  
difficulty sitting still
- Appears clumsy/bumps  
into others

## **Motor Planning/Praxis**

- Difficulty initiating, planning  
and executing tasks (fine  
motor, gross motor and  
academics)

## **Postural Strength**

- Difficulty sitting upright at a  
desk
- Challenges with endurance



# Possible Contributing Factors: Occupational Therapy

## **Fine and gross motor skills**

- Difficulty with writing and table top activities
- Difficulty maneuvering around school environments

## **Visual motor/perception**

- Difficulty with scanning and using eyes together
- Reverses letters, numbers and words

# Social Emotional: What does it mean?

The process of acquiring the skills to:

- Recognize and manage emotions
- Develop caring and concern for others
- Make responsible decisions
- Establish positive relationships
- Handle situations effectively

CASEL, 2003

# Possible Contributing Factors: Social Emotional

- Poor self awareness/  
understanding of feelings
- Decreased self advocacy
- Lack of empathy and  
caring
- Poor communication  
skills
- Difficulty taking  
responsibility
- Poor problem solving  
ability/conflict resolution  
skills
- Poor organization/  
executive functioning  
skills

# Practical Solutions for the Classroom

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# Practical Solutions: Setting up the Lesson

- Review the schedule
- Establish “The Plan”
- Preview expectations – academic and behavior (road map), small/whole group expectations
- Set a visual timer
- Visual supports for necessary materials
- Demonstrate what students will be doing/  
show a model

# Practical Solutions

- Auditory perceptual development
  - Color coding
  - Matching with beginning, middle, and end
  - Sequencing words and stories
  - Similarities and differences
  - Word and sentence meanings
  - Dramatic play

# Practical Solutions

- Visual Supports
  - Book covers - analysis
  - Graphic novels
  - Picture analysis - foreground/ background
  - Enhance story telling and oral expression
  - Drawing out events
  - Two column note taking
  - Directional Top/Down or Down/Up Thinking
  - KWL charts/Venn Diagram
  - Finding a formula for types of questions
  - Chunking information

# Practical Solutions

- Use of Comics - sequential language
  - concrete and abstract language
- Use of sports page for inferential language
- Magazines - advertisements
- License Plates
- Use of Phone Book
- Store Products - use of Visualizing and Verbalizing Concepts



# Importance of Movement on Learning:

- In the same way that exercise shapes up the muscles, heart, lungs and bones, it also strengthens the basal ganglia, cerebellum and other areas of the brain
- Exercise not only fuels the brain with oxygen, but it also feeds it neurotrophins (high-nutrient food) to enhance growth and greater connections of neurons
- Aerobic conditioning is also known to assist in memory
- Researchers have found that children who engage daily in exercise show superior motor fitness, academic performance and attitude towards school than those who do not
- Studies suggest that exercise can reduce stress and allow students to use the higher order thinking areas of the brain

# “Getting Ready to Learn”:

## Integrating Movement and Learning:

- Movement can provide one means for practicing the acquisition of new information and formation of memories
- Changing the routine or format of lessons can increase focus and motivation to learn
- Particularly beneficial for students who prefer a learning style such as : spatial or kinesthetic learning (need to “do the information”) rather than see or hear it
- Active instruction can wake the brain

## “Getting Ready to Learn”:

- Quiet stretching can calm and refocus the brain if over-activated
- Motor activities can help circulation and function to the lower brain centers
- Those individuals who rely on physical and visual cues in order to comprehend or participate, benefit from active learning where movement is linked with content knowledge and language

# Practical Solutions: Social Emotional

## **School Wide Lesson Planning:**

- Self advocacy
- Community Building
- Peer mentoring
- Following directions
- Self awareness
- Recognizing abilities
- Direct Instruction in Social Skills, Social Thinking (MGW) and Social Emotional Learning

# Practical Solutions: Social Emotional

## **Parent Partnership**

- Definition
- What it looks like
- Positive Impact for Student Success

# Resources

- Visualizing and Verbalizing
- Critical Thinking Books and Software
- CASEL(Collaborative for Academic, Social and Emotional Learning)
- Linguisystems Publishers
- Thinking Publications
- Capstone Press - Graphic Novels
- Learning Ally (membership)
- Bookshare (membership)
- Social Stories

## Computer programs:

- Inspiration
- Earobics
- Comic Life
- Co:Writer

## Movement programs:

- Brain Gym
- Yoga
- Alert program

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