Learning Disabilities & ADHD

- Understanding
- Overlap
- Early Identification
- Supports

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- 38 yrs. at University of Northern Iowa
- 30 yrs. taught in K-7 Resource Program
- Supervise Field Experiences
- Methods Courses in Special Education
OUR MISSION

The Learning Disabilities Association of Iowa is dedicated to identifying causes and promoting prevention of learning disabilities and to enhancing the quality of life for all individuals with learning disabilities and their families by:

- Encouraging effective identification and intervention,
- Fostering research, and
- Protecting the rights of individuals with learning disabilities under the law.

WHAT IS A LEARNING DISABILITY?

A learning disability is a neurological (brain) condition that interferes with an individual's ability to store, process, or produce information. This causes learning difficulties.

A learning disability can affect one's ability to read, write, speak, spell, compute math, reason and can also affect an individual's attention, memory, coordination, social skills and emotional maturity.

It's sometimes called THE INVISIBLE DISABILITY.
Other Disabilities
- visual, hearing, or motor
- intellectual or developmental
- behavioral or emotional
- autism

Environmental or Cultural Factors
- economic disadvantage
- second language learners
- family problems
- adoption or guardianship

Lack of Education
- inadequate instruction
- frequent moves
- absence due to illness

Learning disabilities do not include learning problems that are primarily the result of:

FACTS ABOUT LEARNING DISABILITIES

Learning Disabilities by the Numbers

- 38% of students with IEPs are identified with a Learning Disability - the largest category
- 45% of children with ADHD also have LD (learning and attention issues)
- 1 out of 16 public school students have an IEP for LD and/or ADHD
- 1/3 of students with LD and/or ADHD have repeated a grade
- 86% of work-age adults with LD and/or ADHD are unemployed
- 1/2 of young adults with LD or ADHD have had encounters with the justice system

Chicken or the Egg

Myths & Misperceptions

A large body of research has shown these beliefs to be untrue.

- While too much television or a poor diet may negatively impact brain development and functioning, there is no proof that these factors alone cause learning disabilities.
- The claim that vaccinations cause LD or autism has been disproven.
  
  [Link: https://www.disabilityscoop.com/2015/04/21/study-mmr-autism-risk/20231/]

What We Know About Causes

- LD often runs in families
- Problems during pregnancy and birth
  - drug and alcohol use
  - maternal illness or malnutrition
  - prematurity
  - complications during delivery
- Incidents after birth
  - head injuries
  - extreme deprivation
  - exposure to toxic substances

There is often no obvious cause for a person's learning disability.
THE “SPECIFIC” IN SPECIFIC LEARNING DISABILITIES

 Sometimes called a “language-based learning disability”
 Deficit in sound/symbol component of language
 Severity can differ
 Marked by difficulty with:
  ✓ accurate and/or fluent word recognition
  ✓ spelling
  ✓ decoding (“word attack”)
 Often impacts:
  ✓ reading comprehension
  ✓ vocabulary knowledge
  ✓ writing skills

http://ldaamerica.org/types-of-learning-disabilities/dyslexia/

Reading (Dyslexia)

 Difficulty learning and using written language
  ✓ slow, labored reading
  ✓ listening comprehension often better than reading comprehension
  ✓ may not appear until upper elementary
 Marked by difficulty with:
  ✓ accurate and/or fluent word recognition
  ✓ spelling

http://ldaamerica.org/types-of-learning-disabilities/dyslexia/

Reading (Dyslexia)

 Often impacts:
  ✓ reading comprehension
  ✓ vocabulary knowledge
  ✓ writing skills
  ✓ verbal and oral expression
  ✓ foreign language learning

Eida.org, Understand.org, Dyslexia/Yale.edu
Writing (Dysgraphia)

Affects many areas of writing and fine motor skills
- not legible
- inconsistent use of space, style
- poor spatial planning on paper
- odd grip, hand pain
- spelling
- writing paragraphs and stories
  - getting ideas on paper
  - thinking while writing

http://ldaamerica.org/types-of-learning-disabilities/dysgraphia/
<table>
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<th>22nd Grade</th>
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Through Your Child’s Eyes

www.understood.org/en/articles/through-your-childs-eyes

Affects understanding of what is seen, or the ability to draw or copy
- Often seen with dysgraphia or nonverbal LD
- Impacts many academic areas, especially reading and writing

Signs and symptoms
- Missing small differences in shapes or letters
- Reversals
- Trouble cutting or copying; messy papers
- Losing place in reading
- Eye fatigue

Visual Perceptual/Visual Motor Deficit

http://ldaamerica.org/types-of-learning-disabilities/visual-perceptual-visual-motor-deficit/

Cutting and Writing
Near and Far Point Copying

- Visual Tracking
- https://adayinourshoes.com/lep-goals-handwriting/

Driving

- merging
- parallel parking
- turning a corner
- parking in a garage

Math
(Dyscalculia
dis – cal – qu – lee - u)

Affects ability to understand numbers and learn math facts
- Patterning
- Counting
- Sequencing
- Math facts
- Place value
- Time and money
- Word problems
- Organizing problems on page

http://ldaamerica.org/types-of-learning-disabilities/dyscalculia/
Guess Who...

- Is a person with dyslexia.
- Performed poorly in school.
- Later discovered his ability to connect with people.
- Founded Virgin Group companies.
- Is the 7th richest citizen in the UK* (net worth: $4.2 billion)

*2014 Forbes List of Billionaires

www.friendsofquinn.com/

Sir Richard Branson

Listening
(Auditory Processing Disorder)

Sometimes called Central Auditory Processing Disorder
- Auditory discrimination
- Auditory figure-ground
- Trouble screening out background noise
- Auditory recall
- Trouble following multiple directions

"Be sure and put some of those neutrons on it."
-Mike Smith, baseball pitcher, ordering a salad at a restaurant

http://ldaamerica.org/types-of-learning-disabilities/auditory-processing-disorder/

A Few More...

- My tea hoax farm ladle egg horns grow.
- Mighty oaks from little acorns grow.
- Want a drain sit boxes.
- When it rains it pours.
- Win rum dues a romance stew.
- When in Rome do as the Romans do.
- Law tent britches full in town.
- London Bridge is falling down.
When I hear, I forget. 
What I see, I remember. 
What I do, I understand.

Xunzi (340-245 BC)

Language Processing Disorder

A specific type of Auditory Processing Disorder
- Relates only to the processing of language
- Affects expressive and/or receptive language

Signs and Symptoms
- Difficulty with meaning of spoken language
- Poor reading comprehension
- Can describe or draw an object, but have trouble naming it
- Difficulty expressing thoughts

http://ldaamerica.org/types-of-learning-disabilities/language-processing-disorder/

Non-Verbal Learning Disabilities (NVLD)

Trouble interpreting nonverbal cues; may have poor coordination
- Higher verbal skills, weaker social and coordination skills
- "Illusion of competence"

Signs and Symptoms
- Trouble recognizing nonverbal cues
- Clumsy
- Difficulty coping with changes in routine
- Difficulty generalizing previously learned information
- Makes very literal translations
- Asks too many questions; inappropriately interrupts flow of a lesson

http://ldaamerica.org/types-of-learning-disabilities/non-verbal-learning-disabilities/
Can A Person Be Both Gifted and LD?

- Could not remember the letters of the alphabet or math facts.
- Teacher said he was too stupid to learn.
- Greatest inventors of all time
- 1,093 inventions – light bulb, phonograph, microphone.
- Invention is 99% perspiration and 1% inspiration.
- Saw failure as an opportunity to learn.

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Thomas Edison

Dear Mother,

I have grown considerably. I don't look much like a boy now. I have a large mustache and I have a box containing a few books from Memphis that I promised to send them.

Your son,

Al

Startled the Maybe several weeks. I have grown considerably. I don't look like a boy now. I have a large mustache and I have a box containing a few books from Memphis that I promised to send them.
Guess Who...

- Could not talk until the age of 4.
- Didn’t learn to read until age 9.
- Was considered by teachers to be slow, unsociable, and a dreamer.
- Failed his entrance examination into college.
- Became a theoretical physicist.
- Received the 1921 Nobel Prize for Physics.


ADHD with Accommodations

RELATED DISORDERS
Attention Deficit Hyperactivity Disorder (ADHD)

ADHD affects focus, attention & behavior, and can make learning challenging.

- Although ADHD is not considered a learning disability, research shows that 30-50% of children with ADHD also have LD.
- Between 3 – 5% of children have ADHD-at least one out of a class of 24-30 children.

Three subtypes:
- Hyperactive/Impulsive
- Inattentive
- Combined

http://ldaamerica.org/types-of-learning-disabilities/adhd/

Executive Functioning (EF)

Affects planning, organization, strategizing, attention to details & managing time and space.

- “Thinking about thinking”
- Difficulty organizing all aspects of learning, materials, work completion
- Although not a learning disability, weaknesses in EF are almost always seen in the learning profiles of individuals with LD or ADHD.

The good news...
- EF skills can be taught

- Many low and high tech strategies are available
- Cell phones & other small devices - a great help


www.understood.org/topics/focus-and-attention

Dyspraxia

Problems with movement and coordination, language and speech
- Often exists with dyslexia, dyscalculia, or ADHD
- Difficulty with muscle control
- Poor balance
- Coordination between sides of body
- Sensitivity to touch
- Treatments include occupational therapy or sensory integration training

http://ldaamerica.org/types-of-learning-disabilities/dyspraxia/

Memory

Three types of memory are important to learning:
- Working memory
- Short term memory
- Long term memory

Affects storing & later retrieving information or getting information out.

All three types are used in processing verbal and non-verbal information.

http://ldaamerica.org/types-of-learning-disabilities/memory/

Supports

- Relationships
- Strengths & Interests
- Active Engagement
- Prevention
- Mindfulness
- Extra Assistance – summer and homework
Relationships

- Family
- Teachers
- Friends
- Community

Best Thing Since Sliced Bread

Don't care how much you know,
Want to know how much you care.

Strengths and Interests
Teach Procedures and Strategies

- ACTIVE LEARNING
- Look
- Ask & Answer
- Work Done
- Set Goals

Understood.org

Getting sleep

Mindfulness

Breathe Like A Bear
What We Know WORKS

**Reading**
- 5 Components
  - Phonological Awareness
  - Phonics
  - Fluency
  - Vocabulary
  - Comprehension

**Writing**
- Early writing
- Words and sentences
- Grammar
- Mechanics
- Paragraphs and essays
- Spelling

What We Know WORKS

**Math**
- Early skills
- Number concepts
- Computation
- Problem solving
- Applications
  - Time
  - Money

**Learning in Content Areas**
- Understanding textbooks
- Vocabulary
- Organizing information
- Tests

**Academic Accommodations**

Accommodations:
- level “the playing field”
- give students with LD equal access to the curriculum
- help them learn more effectively
- help them show what they know
- do not change grade level expectations for learning

http://ldaamerica.org/accommodations-techniques-and-aids-for-learning/
Strategies for Executive Functioning

- Checklists for organization
- Large projects broken down
- To-do lists with priorities highlighted
- Short work periods with breaks
- Provide systems for routine tasks
- Time limits for task completion
- Consistent daily routines
- Use of sticky notes
- Cell phone alarms & messages
- Memory strategies


Q & A

“Learning disabilities are not a prescription for failure. With the right kinds of instruction, guidance and support, there are no limits to what individuals with LD can achieve.”

Sheldon H. Horowitz, Ed.D., Director of LD Resources, National Center for Learning Disabilities
More Facts...and Why It’s So Important To Understand LD

- 75% - 80% of special education students identified as LD have their basic deficits in language and reading*
- 19% of students with LD drop out of high school**
- 28-43% of youthful offenders have been identified with a disability; majority LD***
- Up to 50% of the prison population has some type of learning disability****
- 60% of adults with severe literacy problems have undetected or untreated learning disabilities*****

*National Institutes of Health  **National Center for Learning Disabilities  ***National Council of Juvenile and Family Court Judges  
****1995 Washington Summit on Learning Disabilities  *****National Adult Literacy and Learning Disabilities Center

ACROSS THE LIFESPAN:
KEYS TO SUCCES
Across The Lifespan: Keys To Success

PREVENTION
- Good prenatal health & medical care
- Avoid environmental toxins
- Read to your baby!
- Be aware of risk factors
  - Knowledge
  - Preparation

EARLY CHILDHOOD
- Early intervention is key!
- Good medical care & vaccinations
- Language-rich, stimulating environment
- Quality preschool programs
- Be aware of developmental milestones
- Know where to find help
  - Birth to age 3 services

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PREPARATION
- Talk about concerns
- Get your child ready
- Be aware of early signs
- Know your rights
- Develop relationships with your child’s teachers
- Frequent communications

MIDDLE SCHOOL
- Preparation for entry
  - Talk to school
  - Get your child ready
  - Transition planning
  - Social / emotional issues

MIDDLE SCHOOL
- Preparation for entry
  - Talk to school
  - Get your child ready
  - Transition planning
  - Social / emotional issues

HIGH SCHOOL
- Preparation for entry
- Frequent communications
- Post-secondary planning
  - Disability Services-Voc. Rehab
  - College requirements
- Course selection for graduation
- Scholarships
- Self-advocacy skills
- Frequent communications

ADULTHOOD
- IDEA no longer in effect
- Living
  - Social / emotional issues
- Learning
- Working
  - Know your rights
  - Accommodations on the job
- Finding support

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