

HOW THE SPECIAL NEEDS BRAIN LEARNS

By David Sousa
Corwin Press, 2001

- As we gain a greater understanding of the human brain, we may discover that some students designated as “learning disabled” may be merely “schooling disabled.”
- Meaning or relevancy is key to focus, learning, and retention.
- Students with learning disabilities need more time and guidance than others to rehearse new learning in order to determine sense and recognize meaning.
- Rehearsal contributes to, but does not guarantee information transfer into long-term storage; however, there is almost no long-term retention without rehearsal.
- The brains of today’s students are attracted more than ever to the unique and different (novel).
- Sensory preferences of U.S. student population: Visual – 46%, Kinesthetic-Tactile – 35%, Auditory – 19%
- Most effective form of teaching is one that combines direct instruction with teaching students the strategies of learning (metacognition).
- Component that has the greatest effect on student achievement is control of task difficulty. Next are working in small groups (five or less) and using structured questioning.
- LD students
 - Are often overwhelmed, disorganized, and frustrated in new learning situations
 - Have difficulty following directions
 - Have trouble with the visual or auditory perception of information
 - Have problems performing school tasks, such as writing compositions, taking notes, doing written homework or taking paper-and-pencil tests
 - Have a history of academic problems and believe they cannot learn that school tasks are just too difficult and not worth the effort or that if they do succeed at a task, it must have been due to luck
 - Do not readily believe that there is a connection between what they do, the effort they make, and the likelihood of academic success.
- Students with learning disabilities need to become strategic learners, and not haphazardly use whatever strategies or techniques they have developed on their own.
- Acquisition strategy - used initially to learn new information or skills; Storage strategy - used to manipulate or transform information so that it can effectively be placed in memory; Knowledge strategy - Used to recall or to show what has been learned
- Gifted students can have learning disabilities.
- Guidelines for working with special needs students
 - Capitalize on the student’s strengths
 - Provide high structure and clear expectations
 - Use short sentences and simple vocabulary
 - Provide opportunities for success in a supportive atmosphere to help build self-esteem
 - Allow flexibility in classroom procedures
 - Make use of self-correcting materials that provide immediate feedback without embarrassment
 - Use computers for drill and practice and for teaching word processing

- Provide positive reinforcement of appropriate social skills
- Recognize that students with learning disabilities can greatly benefit from the gift of time to grow and mature.
- Strategies for involvement and retention
 - Get their attention
 - Make it relevant
 - Model
 - Use teams
 - Set goals
 - Find out what they already know
 - Use visuals
 - Go for the big picture
 - Think and talk aloud
 - Suggest mnemonic devices
 - Use a variety of practice formats
 - Explain the value of note-taking
 - Use closure strategies regularly
- ADHD-like behavior in students is inadvertently created when
 - Teachers under pressure to cover curriculum move too fast
 - The main mode of instruction is teacher talk
 - Room arrangements allow students to hide from the teacher and create mischief
 - Discipline is arbitrary and perceived as unfair
 - There are few or no opportunities to get up and move around
 - The classroom is too hot or too dark
 - There are few opportunities for students to interact with each other
 - The classroom emotional climate is neutral or tense
- General guidelines for working with ADHD/ADD students
 - Provide the student with a structured, predictable, and welcoming environment
 - Modify the curriculum
 - Less is more
 - Mix activities of high and low interest
 - Teach organizational and study skills
 - Use visual references for auditory instruction
 - Give students simple decisions to make; have them explain their decision to you
 - Use auditory signals such as a ringing bell
 - Use visual signals such as raising your hand
 - Use color
 - Use eye contact
 - Use story-telling and humor
 - Start a lesson with an interesting question or problem
- Research is clear: successful reading starts with phonemic awareness
- Context is not the primary factor in beginning word recognition