



ATTENTION DEFICIT: THE LEAKY FOUNDATION

Each remembered experience in our lifetime requires attention. The fetus is aware of the sound of its parents. A child identifies the sound of a bee, the smell of a hamburger cooking, or the sight of a loved one coming home. Attention must be directed to a given “channel” of experience rather than the entire spectrum of sights, sounds, smells, tastes and/or feelings present at that moment for more concise learning to occur. If a child focuses on the sounds and activities at the picnic, the smells of cooking hamburgers and the sounds and sight of the bee at the time, he will come away with a sense of “picnic” but may have missed the presence and identifiable characteristics of the bee completely. If she focuses totally on the bee and all of its attributes, she may not learn the social cues necessary to get along with the other children at the picnic. If her attention focuses on the words of the people but her attention switches on and off, she’ll catch bits and pieces of experiences leading to bits and pieces in her memory....Thus.... THE LEAKY FOUNDATION.

Focused attention becomes more and more essential as experiences become more vast and complex. As a child develops greater attention, memory and experience, there is more sorting, categorizing and processing of information necessary. Piecemeal attention and memory becomes more and more of a problem as information needs to be layered upon information.

A simplistic presentation of the pathways of learning would be:

- Selective attention (focus, engage and shift of attention)
 - Visual
 - Auditory
 - Tactile
 - Perceptual
- Store in short term memory
 - Store briefly what is heard, seen, touched, or experienced

- Process
 - Combine with other new or old memories
 - Sort
 - Categorize
 - Recombine

- Store important features in long term memory
 - Respond
 - Verbally
 - Visually
 - Motorically

Full attention leads to full recording and clear responses. Every experience recorded with partial attention will be recorded as partial information.

Selective visual attention difficulties impacts the awareness of faces – the way they look and the gestures that accompanied particular reactions. Visual attending problems affect how some see space, direction, relationship of rooms in a building, which way to move a hand to create a shape or open a container, where to put pieces in a puzzle. Recognition of letters/numbers and the ability to copy or create them from memory is affected by visual attention. Attending difficulties interfere with recognition of words, memory of assignments, being able to remember ideas and pull them together to write a report...Be aware that with visual attention difficulty the person can usually go back to double check and use TIME and their verbal awareness to help them piece some of the information together.

A person who has greater difficulty with auditory attention cannot go back and find the words again --- unless they are repeated. Therefore, the person with auditory attention difficulties will have trouble remembering the sounds of speech, sounds to be blended into words, directions that are given and, perhaps most importantly, the words and ideas expressed by friends and family as well as teachers. Once the words leak out, they can't be retrieved unless someone repeats the words for them...or draws a picture...or writes the words down.

Some people with selective attention difficulties have trouble with both auditory and visual attention. They can attend well when they can “do” what they are being shown and act out the rules for the game as they are being said. Some people have difficulty taking new information in through tactile experiences and transfer them into concepts or ideas. They need to hear or be shown new ideas. Others need to have new information. Other people have trouble with selective attention in all modes.

In spite of a brain which is ready to receive information, the leaky foundation makes it difficult for people to focus and hold onto the information long enough to place it in memory so it can be processed and applied. Even strongly gifted people with an attention deficit disorder experience a breakdown in their learning capabilities as a result of the inability to focus and therefore store new experiences - the LEAKY FOUNDATION.

Attention deficit is rarely a stand alone condition. Many learning difficulties are due to the particular organization of an individual’s brain making it difficult to store or access certain information, but the possibilities from early childhood to adulthood:

- Reading Problems
 - Sounds and letters
 - Words
 - Sentences
 - Vocabulary
 - Comprehension
 - Words
 - Sentences
 - Paragraphs
 - Chapters
 - Entire books
 - Oral expression difficulties
 - Attending to what has been said
 - Finding the words to respond appropriately
 - Written Expression difficulties
 - Connected to the reading difficulties
 - Memory for the shape of letters, words, etc.
 - Problems with part to whole organizing due to attention/memory difficulties

- Spelling problems
- Math difficulties
 - Memory of facts and of process
 - Combining facts and process
- Organization problems
 - Hearing the assignment
 - Remembering the assignment
 - Remembering the pieces necessary to create the whole
 - Being able to pull the pieces together into the whole

The list goes on. Difficulties may not truly weigh the student or adult down until they are at the college level or in a job situation requiring specific, detailed, organized attention and memory. There are specific stages at which we receive more referrals.

- First grade
 - the assumption is made that children should be able to sit at a desk for long periods of time and focus their attention on specific academic skills.
- Third grade
 - Children are no longer taught to read. It is assumed that they can use their reading to learn.
- Middle school
 - Reliance on reading speed and comprehension increases. It is assumed that students can assume responsibility for their own assignments. Math processes rely upon well-learned facts being combined with complex process.
- Freshmen
 - Time management, reading facility and math foundations are assumed.
 - Attention to and memory for details increases.
- Juniors
 - Preparation for college increases memory and organizational demands.
- College
 - Attention, memory, processing and organization are necessary elements for success.

Rather than assume that any of the problems suggested above are due to the “lazy” or “she could do it if she wanted” syndrome, efforts should be made to support the LEAKY FOUNDATION which is leakier on some days than others. We are looking at a chemical difficulty in the brain – not an attitude problem. If we work with the person rather than against them, we have a chance of helping them to become a more

successful and compassionate person. The old “it’s a dog eat dog world” theory could be used to try to “whip” people with an attention deficit into shape, but leaky foundations have a way of crumbling when there is too much stress placed on them regardless of how old they are.

Here are some ideas to strengthen the foundation so we will have fewer people with A.D.D. whose learning experiences resemble the tower of Pisa.

REPETITION THROUGH VARIOUS MODALITIES TO HELP “FILL IN THE HOLES”
TIME TO BE ABLE TO FIND THE INFORMATION WHICH HAS BEEN STORED IN UNUSUAL PLACES

1. Help students develop a system for controlling their desk, book bag and locker.

A red “put and take” folder to get papers to and from school



Left – all papers to home – assignments and school notices (empty at home daily)

Right – all papers to return to school (empty daily by the end of day)

Teacher helps to see that assignments are understood

Parents help with:

- long term assignment transfer to monthly calendar and breaking assignment into smaller pieces with shorter due dates
 - organization of homework space
 - reorganization of returned papers
 - clean book bag one time per month (for younger; older can follow calendar date)
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- An assignment sheet clipped to the left pocket (where classes are listed in proper chronological order) – prevents loss of assignment book
 - A star or check by each assignment that required a book to go home
 - Transfer long term assignments to a monthly calendar
 - Teacher writes assignments on board for all students’ top copy. A “buddy” may assist process.

- (Older students – See article re: Organization)

2. In class

- Provide clear outline at beginning of semester
- Provide clear assignment patterns and due dates
- Write assignments on board
- Seat near the front of the room
- Give cues to help jog student's memory and attention
 - New vocabulary first
 - Summary or key concepts first to assist memory and order
- Give work in smaller amounts
- Make sure student clears and locates materials before beginning to work
- Teach memory skills
- An extra supply of materials in the classroom can help
- Identify the student's greater learning style to assist more complete intake
 - Visual – auditory – kinesthetic input
 - Whole to part or part to whole
 - Solo or group
 - Verbal output or visual output
- Write short positive notes to assist with attending and attitude

3. At home

- Everyday:
 - Have child repeat directions/requests so they process the directions
 - Build for success through greater understanding of needs
 - Open communication – awareness
 - Provide as much routine as possible
 - Use visuals to help child remember chores and sequences
 - Teach memory skills
- Schoolwork:
 - Make sure student clears area
 - Give cue to help student begin work
 - Give assistance with organizing assignments, time, long and short term work
 - An extra set of books at home can help

4. Tests

- Provide a study guide
- Provide the student with a checklist for the items that will be necessary for taking the exam. Help the student begin the exam by having him explain his plan for taking the test.
- Make sure the test is in the same format as the previous instruction
- Provide objective test items, avoiding short term answer and essay tests.

- Provide fewer distractions for multiple choice items and fewer choices for matching items
- Give frequent quizzes – avoid long tests
- Help student monitor time by periodically announcing time remaining
- If essay questions are required, accept an outline, dictated answer or taped answer