

30 Minute Lesson: Learning Disabilities

Self-Study Version

A learning disability is a neurological disorder. In simple terms, it results from a difference in the way a person's brain is "wired." People with learning disabilities are as smart or smarter than their peers, but they have difficulty reading, writing, spelling, reasoning, recalling and/or organizing information if left to figure things out by themselves or if taught in conventional ways.¹ This lesson focuses on building an understanding of learning disabilities, particularly from an employment standpoint.

Learning Objectives

- < Build an understanding of learning disabilities: causes, prevalence, management strategies, characteristics
- < Review information about the types of learning disabilities
- < Review information about successful employment approaches for people with learning disabilities

Test Your Knowledge!

1. What is the most common difficulty associated with learning disabilities?
2. True or False: a person with learning disabilities could also have a cognitive disability (e.g. IQ less than 85)
3. What are three types of specific learning disabilities?
4. True or False: in most cases, the cause of a learning disability is not known.
5. *"John has learning disabilities."* What characteristics come to mind when you hear that phrase? Write your list below, and then compare notes with the others in your small group.



¹ <http://www.ldonline.org/ldbasics/whatisld>

What is a Learning Disability?

A learning disability is one of a group of neurological disorders that affect the brain's ability to receive, process, store, and respond to information. Learning disabilities can affect a person's ability in the areas of listening, speaking, reading, writing, and mathematics.



People with learning disabilities have at least average intelligence but have difficulty acquiring the basic academic skills that are essential for success at school and work, and for coping with life in general. These individuals show a distinct gap between the level of achievement that is expected and what is actually being achieved.

Learning disabilities can be lifelong conditions that in some cases affect many parts of a person's life. In some people, many overlapping learning disabilities may be apparent. Other people may have a single, isolated learning problem that has little impact on other areas of their lives.

What Causes Learning Disabilities?

Evidence seems to show that most learning disabilities do not stem from a single, specific area of the brain, but from difficulties in bringing together information from various brain regions (National Institutes of Mental Health). Some factors that may cause these difficulties include:

- Genetics – many people with LD have parents or other relatives with similar difficulties. However, a parent's learning disability may take a different form in the child. For this reason, it seems unlikely that a specific learning disorder is inherited directly.
- Problems during pregnancy or birth – e.g. drug or alcohol use, low birth weight, lack of oxygen, premature or long labor.
- Incidents after birth – head injuries, poor nutrition, toxic substances such as lead

Learning disabilities are not caused by poverty, environmental factors, or cultural differences. In most cases, there is no apparent cause for a learning disability.

How Many People Have Learning Disabilities?

The National Institutes of Health estimates that 15% of the American population, or one in seven Americans, has some type of learning disability. The majority of all individuals with learning disabilities have difficulties in the area of reading.

Is Attention Deficit Hyperactivity Disorder (AD/HD) Considered a Learning Disability?

Attention disorders, with or without hyperactivity, are not categorized as learning disabilities. However, approximately one-third of people with LD also have AD/HD which makes it difficult for them to concentrate, stay focused, or manage their attention to specific tasks.

What about Learning Disabilities in Adults?²

It used to be widely believed that learning disabilities emerged when a child first started school and disappeared when a student left academic pursuits behind as an adult. We know now, however, that while many adults do learn to compensate and to a degree overcome their learning disabilities, they never actually go away.

To further complicate matters for adults with LD, the information age has brought an emphasis on lifelong learning and job flexibility. In a world in which the typical individual can expect to undertake several careers, the academic pressure to read, learn and remember new material never ceases.

The prevalence of learning disabilities increased among students in American schools over recent years. There are many possible explanations for this: better diagnostics, increased environmental hazards, etc. One fact is clear: there were many children a decade or a generation ago who had learning disabilities that were never diagnosed and who never received appropriate assistance.

Many adults (some of whom are unaware of their LD) have developed ways to cope with their difficulties and are able to lead successful, functioning lives. Others continue to struggle. It is never too late to get help for a learning disability. Finding out about a learning disability can be a great relief to adults who could not explain the reason for their struggles in the past.

Can you name some well-known and successful people who have been open about their learning disabilities (or are presumed to have had learning disabilities)? (There are some answers on the last page.) How do these folks differ from the individuals you serve in employment services?

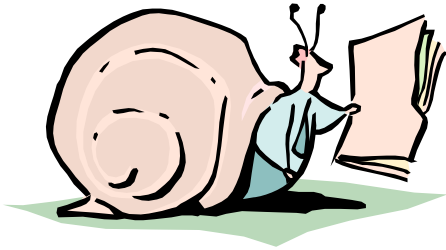
² http://www.ldanatl.org/aboutld/adults/special_pop/adult_ld.asp

What Are the Common Effects of Learning Disabilities?

There are a couple of things to keep in mind when considering the characteristics of adults with learning disabilities. First, there is a great diversity across people with LD. This diversity exists because an individual can have one specific disability or several of them. Moreover, learning disabilities do not manifest themselves in individuals in exactly the same way. Some learning disabilities can be mild, while others can be quite severe.

While individuals with LD have average or above average intelligence, as a group they do not excel in employment situations at the same level as their peers. People with learning disabilities often face these types of challenges on the job: (from <http://www.nclld.org/content/view/full/429/413/>)

Inefficiency: Individuals with LD may take significantly longer than their co-workers to accomplish tasks, leading to overall low productivity on the job. They may be frustrated trying to keep up with the workload, and/or may worry about co-workers resenting their slow pace or ridiculing their difficulties staying organized and getting their work done.



High Error Rate with Tasks Involving Academic

Skills: Individuals with LD may have trouble writing memos, taking messages, reading instructions, filling out forms, and making changes. They may find themselves trying to avoid tasks, especially if they feel embarrassed when the boss or co-workers must double-check and correct errors.

Problems Learning a Sequence of Tasks: People with LD may have difficulty learning and carrying out multiple-step tasks and following directions, especially when steps need to be carried out in specific ways or in a particular order. A person who has trouble completing multi-step tasks in the right order may find himself looking for shortcuts (that unfortunately often have a negative impact on the quality of his end product), and may find that the speed and the accuracy of his work will likely suffer.

Time Management: Learning disabilities can have a negative impact on a person's ability to manage time efficiently. Some frequent challenges include:

- having trouble planning ahead, and keeping a calendar of activities
- arriving too late or too early for meetings
- meeting critical work deadlines

How do these challenges differ from those experienced by your customers with disabilities like mental retardation, traumatic brain injury, or autism? In what ways are they similar?

Poor Self Esteem: Many adults with LD experience an overall feeling of lack of self-worth, low self-esteem, and a poor self-concept. Most have had particularly painful experiences during their school-age years, both in and out of the classroom. Consequently, it is not uncommon for them to feel dumb, stupid, and incompetent.



Many adults with LD see themselves as incapable or as losers. They feel that if they get something right, they are lucky, and if they get it wrong, then they are dumb! Even adults who have experienced mostly successful lives have reported that they sometimes feel as if they are "impostors." They feel that, despite past accomplishments they still are not worthy of achievement, and that someone "will find out" that they are not qualified or capable.

What are some ways to help people gain confidence in themselves? Write three ideas below.

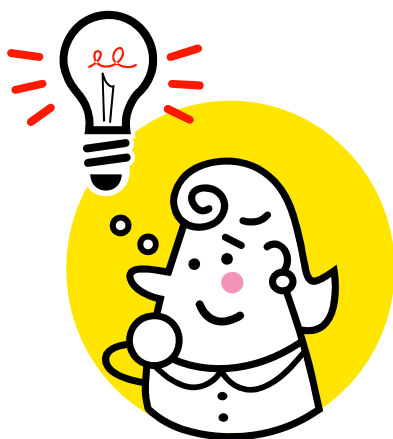
Strengths

(from <http://www.nclld.org/content/view/429/413/>)

Living with learning disabilities inspires some individuals to develop strengths and skills which can be very valuable on the job. Three common strengths are listed below:

Persistence: Determination is one of the most important characteristics seen in people with LD who have achieved success. It is not unusual for people with LD to:

- try different approaches to solving problems, even after co-workers have given up
- share their determination with supervisors and co-workers (often appreciated as a sign of interest, dedication, and loyalty to the company)



Creativity: Individuals with learning disabilities often have great problem-solving skills and are extraordinarily creative and resourceful in the ways that they tackle problems. It is not unusual to find people with LD who:

- come up with innovative and creative solutions to problems at work.
- Are valued by team members as the one to 'think outside the box' or to come up new and unusual ideas

Specialized Talents: Individuals with LD often develop and rely upon unique strengths in specific abilities that help them compensate for their disability, and make them especially valued employees. These might include:

- drawing and design
- public speaking
- mechanical activities and work space adaptation

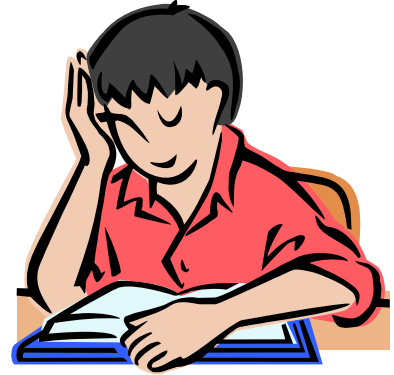
When you made your list of characteristics at the beginning of this lesson, did you list any strengths associated with living with a learning disability, or did you list only barriers?

Types of Learning Disabilities (NINDS)

“Learning disability” is a broad term that covers a pool of possible causes, symptoms, treatments, and outcomes. Here are four specific disorders:

Dyslexia is a language-based disability in which a person has trouble understanding written words. It may also be referred to as reading disability or reading disorder. Some of the characteristics of people with dyslexia include:

- Reads slowly and painfully; reads below the expected level
- Has difficulty understanding non-literal language like jokes or idioms
- Shows wide disparity between listening comprehension and reading comprehension
- Has trouble with spelling
- May have difficulty with handwriting
- Exhibits difficulty recalling known words; has poor memory skills
- May also experience difficulty with math computations
- Has difficulty organizing and managing time

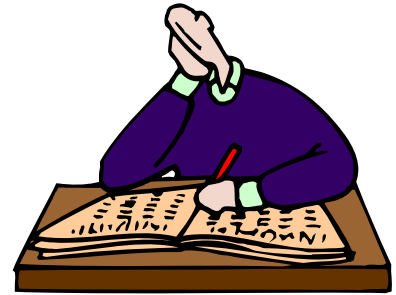


Dyscalculia is a mathematical disability in which a person has a difficult time solving arithmetic problems and grasping math concepts. Some of the characteristics of people with dyscalculia include:

- Has difficulty learning math concepts beyond the basic math facts
- Has poor ability to budget or balance a checkbook, make change, handle money
- Has difficulty sequencing information or events
- Has trouble with time concepts such as sticking to a schedule or estimating time
- Has difficulty understanding concepts related to time such as days, weeks, months, seasons, quarters, etc.
- Has difficulty estimating costs like groceries or bills

Dysgraphia is a writing disability in which a person finds it hard to form letters or write within a defined space. Some of the characteristics of people with dysgraphia include:

- May have illegible printing and cursive writing. Shows inconsistencies: mixtures of print and cursive, upper and lower case, or irregular sizes, shapes or slant of letters
- Large gap between written ideas and understanding demonstrated verbally
- Inconsistent spacing between words and letters
- Exhibits strange wrist, body or paper position
- Has difficulty organizing thoughts on paper
- Has trouble keeping track of thoughts already written down
- Shows poor spatial planning on paper
- Has great difficulty thinking and writing at the same time (taking notes, creative writing.)



Dyspraxia is a disorder characterized by impairment in the ability to plan and carry out sensory and motor tasks. People with the disorder appear "out of sync" with their environment, and often behave immaturely. Symptoms vary and may include poor balance and coordination, clumsiness, vision problems, perception difficulties, emotional and behavioral problems, difficulty with reading, writing, and speaking, poor social skills, poor posture, and poor short-term memory. Some of the characteristics of people with dyspraxia include:



- Trouble with speech control – volume, pitch, and articulation. This can cause severe social awkwardness and unwillingness to attempt social interactions.
- Difficulty writing
- Extreme sensitivity to light, touch, space, taste, smells
- Difficulty with personal grooming
- Difficulty driving
- Very clumsy, poor coordination

Information Processing Disorders (Visual or Auditory)

<http://www.ncl.org/content/view/470/391/>

An information processing disorder is a deficiency in a person's ability to effectively use the information the senses have gathered. It is NOT the result of hearing loss, impaired vision, AD/HD, or any kind of intellectual or cognitive deficit.

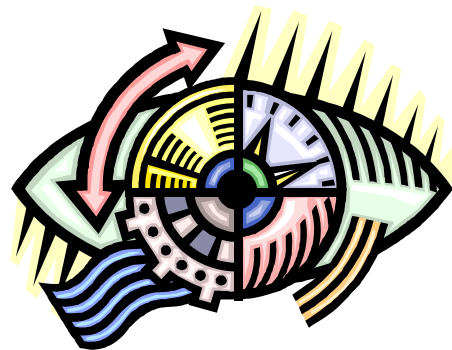
Though information processing disorders are often not named as specific types of learning disabilities, they are seen in many individuals with LD and can often help explain why a person is having trouble with learning and performance. The inability to process information efficiently can lead to frustration, low self-esteem and social withdrawal.

Visual Processing Disorders include:

Visual Discrimination	Comparing the features of different items to distinguish one from another
Figure-Ground Discrimination	the ability to sort out important information from the surrounding environment
Visual Sequencing	the ability to see and distinguish the order of symbols, words or images
Visual Motor Processing	using feedback from the eyes to coordinate the movement of other parts of the body
Visual Memory	the ability to recall something seen
Visual Closure	the ability to know what an object is when only parts of it are visible
Spatial Relationships	the ability to understand how objects are positioned in space in relation to oneself

Common difficulties with Visual Processing Disorders include:

- Accurately identifying information from pictures, charts, graphs, maps, etc.
- Organizing information from different sources into one cohesive document
- Finding specific information on a printed page (e.g. getting a number from a phone book)
- Remembering directions to a location
- Writing neatly and quickly
- Reading with speed and precision



Auditory Discrimination	The ability to notice, compare, and distinguish the distinct and separate sounds in words
Auditory Figure-Ground Discrimination	The ability to pick out important sounds (like verbal instructions) from a noisy background
Auditory Memory	The ability to recall something heard
Auditory Sequencing	The ability to understand and recall the order of words.

Common difficulties with Auditory Processing Disorders include:

- Talking louder than necessary
- Can't remember a list or sequence
- Often needs words or sentences repeated
- Seems to hear but not listen
- Poor ability to memorize information learned by listening
- Interprets words too literally
- Doesn't hear clearly in noisy environments
- Doesn't remember names
- Seems to ignore others when engrossed in a non-speaking activity



Learning Disabilities and Social Skills

Adapted from <http://www.ldonline.org/articles/6010>

Some adults with learning disabilities have difficulty acquiring and using social skills. Learning disabilities involve some sort of deficit in processing information, and this is the link to problems with social skills. The same cognitive style that makes it difficult to process language also makes it difficult to process social information effectively.

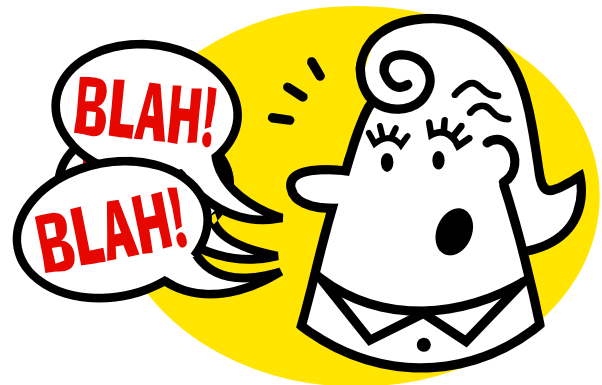
In relating to other people, we depend not only on language but also on nonverbal communication such as facial expressions, tone of voice, and gestures. We learn to make eye contact, to pay attention and express interest, to wait our turn, to respond appropriately. We learn how far or how close to stand to each other, and we learn how to gauge others' reactions to us. We also learn that what's appropriate in one situation, or with one person, may not be appropriate in another. Although we may bumble and stumble here and there, learning how to act appropriately with others comes naturally to most of us, more or less.

Adults with learning disabilities often do not effectively process the nonverbal elements of social interaction. Worsening their difficulties, they are often oblivious to their social clumsiness.

Other characteristics associated with learning disabilities may contribute to social skills deficits. Problems with impulse control and distractibility (often associated with an attention deficit), reasoning (particularly in understanding cause and effect), defining problems, and evaluating consequences have a variety of implications in social situations. A disproportionate number of juvenile offenders have learning disabilities; a number of researchers believe that many of them get into trouble because they do not fully understand the implications of their inappropriate actions.

A common problem is not recognizing the language conventions people use daily; for example, the question "Hi, how are you?" is not really an invitation to spill out every details of one's life story.

Knowing just how loudly one is speaking, and how closely that loudness level approaches the right level for a particular situation, is difficult for some adults with learning disabilities.



Many people with LD need to practice asking for help in receiving information. On the job, the employment specialist can help the employee learn to say, "I want to remember-can you say it again for me?" instead of "Huh?" or to say "I have to write it down-can you

give me more time?" or even "I want to do this correctly -please explain the directions to me one more time."

Poor body image and lack of awareness of the position of body parts can make adults with LD appear awkward or even provocative. Role-playing, sitting in various chairs or couches, getting out of cars, sitting or standing up, walking up or down stairs or performing a variety of ordinary physical activities can be helpful.

Personal space can be invaded by a person who doesn't easily observe body language or facial cues. People with LD who also have spatial discrimination problems may move too close or touch inappropriately, and not be aware of the other person's backing away or negative response. Adults with this problem often find themselves misunderstood. Men may be thought fresh or pushy, and women may be thought to be inviting physical attention they do not want if they stand too close to others or touch inappropriately. Both men and women may be thought too forward or even threatening.

At this point you might think that all adults with learning disabilities suffer from social skills deficits. Beware of generalizations! Many adults with learning disabilities not only have more than adequate social skills: a good number of them consider their social skills to be a significant compensation and a key to success. Adults with learning disabilities are frequently charming, suave, gregarious, likable, astute, even charismatic people.

***What are the employment implications an individual with LD and poor social skills?
How about for a person whose social skills are way better than his/her job
performance?***

Exercise: Job Placement Strategies

**What are strategies and approaches you've found successful in supporting individuals with Learning Disabilities?
Write at least three ideas below.**

Accommodation Ideas

from Suzanne Kitchen, Job Accommodation Network (JAN)

<http://www.jan.wvu.edu/media/LD.html>

Reading from a paper copy:

- Convert text to audio
- Provide larger print or double space the text on print material
- Use color overlays (Irlen lenses) to help make the text easier to read
- Provide materials that are type-written, in a font that is not italicized; if handwritten material must be provided, use print, not cursive
- Have someone read the document aloud to the individual
- Scan the documents into a computer and use Optical Character Recognition (OCR), which will read the information aloud
- Use a reading pen, which is a portable device that scans a word and provides auditory feedback

Reading from a computer screen:

- Use screen reading software, which highlights and reads aloud the information from the computer screen
- Use form-generating software that computerizes order forms, claim forms, applications, equations, and formula fields
- Use manual or electric line guide to help individuals "keep their place" on the computer monitor
- Alter color scheme on computer screen to suit the individual's visual preferences
- Adjust the font on computer screen to suit the individual's visual preferences



Spelling:

- Allow use of reference materials such as dictionary or thesaurus
- Provide electronic and talking dictionaries
- Use word prediction software that displays a list of words that typically follow the word that was entered in a document
- Use word completion software that displays sample words after someone starts typing part of a word
- Allow buddy, coworker, or supervisor to proofread written material

Cognitive process of writing:

- Use Inspiration software, a computerized graphic organizer
- Use Texthelp Read & Write Gold, a software program assisting with spelling, reading, and grammar.
- Create written forms to prompt the writer for information needed

- Allow the individual to create a verbal response instead of a written response
- Permit use of reference books such as a thesaurus or dictionary

Physical process of writing:

- Provide writing aids, line guides or column guides
- Supply bold line paper
- Permit type-written response instead of hand-written response
- Allow use of personal computers
- Use Inspiration software, a computerized graphic organizer
- Use speech recognition software that recognizes the user's voice and changes it to text on the computer screen



Mathematics:

- Use scratch paper to work out math problems
- Permit use of fractional, decimal, statistical, or scientific calculators
- Provide talking calculator or calculators or adding machines with large display screens
- Provide talking tape measure or talking scales
- Use pre-measurement guides or jigs
- Post mathematical tables at desk or in work area

Speaking/Communicating:

- Provide advance notice of topics to be discussed in meeting
- To reduce or eliminate anxiety, provide advance notice of date of meeting when employee is required to speak
- Allow employee to provide written response in lieu of verbal response
- To reduce or eliminate the feeling of intimidation, allow employee to have a friend or coworker attend meeting

Organizational Skills: .

- Help employee reduce clutter in work area
- Hire a professional organizer
- Use color-code system to label or identify materials
- Use calendars (paper, electronic, or both) to remind of deadlines, meetings, tasks
- Build organization skills by attending time management workshops
- Build organization skills through self-education at sites like mindtools.com
- Build "catch up" time into work week or work day

Memory:

- Provide checklists to help remember job tasks
- Use flowchart to describe steps to a complicated task
- Safely and securely maintain paper lists of crucial information such as passwords

- Prompt employee with verbal or written cues
- Allow employee to use voice activated recorder to record verbal instructions
- Provide additional training time on new information or tasks
- Provide refresher training as needed

Time Management:

- Make to-do lists and check items off as they are completed
- Use calendars to mark important meetings or deadlines
- Divide large assignments into smaller tasks and goals
- Remind employee verbally of important tasks or deadlines

Behavior on the job:

- Thoroughly review conduct policy with employee
- Provide concrete examples to explain inappropriate behavior
- Provide concrete examples to explain consequences in a disciplinary action
- To reinforce appropriate behavior, recognize and reward appropriate behavior

Working effectively with supervisors:

- Provide detailed day-to-day guidance and feedback to employee
- Offer positive reinforcement
- Provide clear expectations and the consequences of not meeting expectations
- Give assignments verbally, in writing, or both, depending on what would be most beneficial to the employee
- Establish long term and short term goals for employee
- Adjust supervisory method by modifying the manner in which conversations take place, meetings are conducted, or discipline is addressed

Interacting with co-workers:

- Provide sensitivity training to promote disability awareness
- If feasible, allow employee to work from home
- Help employee "learn the ropes" by provide a mentor
- Make employee attendance at social functions optional
- Allow employee to transfer to another workgroup, shift, or department

How did this list compare to your ideas?

Handout: Tips for Workplace Success (Nancie Payne)³

- Know your learning style and how that style matches up with different jobs.
- Apply for job positions for which you have the knowledge, skills, and abilities to perform at the level required by the employer.
- Know your strengths and be able to describe them; present yourself as a capable individual who can competently perform the job.
- Pursue informational interviews and on-site visits in order to get a feel for different workplace environments and job tasks.
- Request and review job descriptions before applying for positions.
- Disclose learning disabilities to the personnel/human resources staff person after the job has been offered; do so in person (never over the phone) after you have accepted the job. Then make arrangements to speak with the job-site supervisor if and when necessary.
- At the time of disclosure, describe the strategies that assist you in performing job requirements and state workplace accommodations that can help you.
- Ask the supervisor for written job performance expectations what you will be required to learn and apply within the job setting.
- Ask for specific timelines for performance evaluations; be sure you understand when and how your performance will be evaluated.
- Know when and how to request appropriate accommodations.
- If accommodations are provided, establish an evaluation process through which you and your supervisor can review the effectiveness of the accommodations and the possibility of adjustments.
- Do not use your learning disability as an excuse for not doing your best.

³ <http://www.ldonline.org/articles/6009>

Internet Resources on Learning Disabilities

<http://www.ldonline.org>

<http://www.ldanatl.org>

<http://www.nclid.org>

<http://www.ldaamerica.org/>

<http://www.ldam.org/ldinformation/adults/>

<http://www.jan.wvu.edu/media/LD.html>

Quiz Answers!

1. What is the most common difficulty associated with learning disabilities?

The majority of all individuals with learning disabilities have difficulties in the area of reading.

2. True or False: a person with learning disabilities could also have a cognitive disability (e.g. IQ less than 85)

False - by definition a person with LD has average or higher intelligence

3. What are three types of specific learning disabilities?

Dyslexia, dyspraxia, dyscalculia, dysgraphia

4. True or False: in most cases, the cause of a learning disability is not known. *True*

Famous people who have been open about their dyslexia or other LD (Or who are presumed to have had LD):

Albert Einstein, Walt Disney, General George Patton, Nelson Rockefeller, Whoopi Goldberg, Charles Schwab, Tom Cruise, Whoopi Goldberg, Magic Johnson, Walt Disney, Charles Schwab, Thomas Edison, Winston Churchill, Leonardo Da Vinci, Harrison Ford, Jay Leno, Robin Williams, Albert Einstein, Nolan Ryan, Harry Belafonte, Cher, Danny Glover, Gustave Flaubert, William Hewlett (co-founder, Hewlett-Packard), Andy Warhol, John Lennon, Ted Turner, George Burns, Alexander Graham Bell, Bruce Jenner, Tom Smothers, Henry Winkler, Billy Bob Thornton, Nelson Rockefeller, Woodrow Wilson, William Yeats, Hans Christian Anderson

30 Minute Lesson: Feedback Form

Please let us know what you think of this product, so we can continue to better meet your training needs. Fax or mail to Laurie Ford at 6912 220th SW, Suite 105, Mountlake Terrace, WA 98043; Fax (425) 774-9303

Topic of Lesson _____

- Facilitator Version
- Participant Version
- Non-Facilitated Group Version
- Self-Study Version

1. On a scale of 1 to 5, please rate the relevancy of these materials to your job _____
(1 is worst, 5 is best)
2. On a scale of 1 to 5, please rate the positive impact of these materials on your professional skills, knowledge, and abilities (1 is worst, 5 is best) _____
3. On a scale of 1 to 5, please rate the positive impact of these materials on your organization (1 is worst, 5 is best) _____
4. What was the most useful part of the lesson?
5. What was the least useful part of the lesson?
6. How could this lesson be improved?
7. What additional topics would you like to see in a 30 Minute Lesson?