**Station #1 Learning Differences I**

People who have learning disabilities often do not have any physical appearance characteristics that would identify them as having a disability. That is why learning disabilities are often referred to as hidden disabilities. Someone who is cognitively impaired has learning differences that are affected even more severely. People with learning differences may have problems understanding the spoken or written word. This may be due to difficulty in listening, thinking, speaking, reading, writing, spelling or doing math. These people may have average cognitive abilities, as well as no visual or hearing impairments. There are many different kinds of intelligences. It is important to examine how each student learns most affectively and then use those strengths whenever possible. Students with learning differences may require extra assistance in learning ways to understand many things such as written words, how to write or draw, math concepts and social issues.

**Types of Learning Disabilities**

* Dyslexia: Difficulties in being able to read because the letters in a word are possibly in the wrong order, reversed, incomplete or somehow keep moving.
* Dysgraphia: Writing difficulties due to either problems with muscle coordination, or not understanding the letters and words.
* Dyscalculia: Difficulties in doing math problems due to not recognizing numbers, not remembering math facts, or not being able to understand the problem.
* Attention Deficit Disorder (ADD): Difficulties in paying attention, concentrating, and organizing tasks. Some people are very active and impulsive.

**Types of Developmental Disabilities**

When the differences that exist in someone’s brain are great enough to keep that person from learning and growing typically, we say the person has a developmental disability. Symptoms usually appear during the first three years of childhood and continue throughout life. Examples include mental retardation, Autism Spectrum Disorder and Downs Syndrome.

People who have a severe developmental disability usually only learn very basic skills, such as learning to communicate and simple self-care skills. People who have a moderate (or less severe) developmental disability can learn and do more things. They learn skills that will help them get jobs so that they can live as independently as possible. People with moderate developmental disabilities will probably require some assistance from others. People who have a mild developmental disability learn much more, but they have trouble with harder tasks. They can grow up to get jobs and live on their own.

Autism is a neurologically based developmental disorder that lasts throughout a person's life. People who are affected by autism have abnormal or impaired development in social interaction and communication. They have a limited repertoire of activities and interests. They often have problems integrating their senses. Autism is a spectrum disorder in that some people are highly intelligent while others are severally cognitively impaired. Some people are mildly affected in communication and have a generally average sensory system while others are completely non-verbal and tolerate very little sensory stimulus. Autism affects boys four times more often than girls. In 2007, the National Center for Disease Control estimated as many as 1 out of every 166 children born today are affected by an Autism Spectrum Disorder. The cause of autism is still unknown.

**Activities for the Learning Differences Stations**

The main emphasis of the following two stations is that our brains collect information in different orders and we learn in different ways. People with learning differences can learn, but they may need extra help, more time or different strategies to do so. Please mention and possibly role-play throughout these activities that teasing and bullying is inappropriate.

**Station #1 Learning Differences I**

1. This activity should be done first. It sets the stage for learning differently. Show and discuss the black and white pictures of:
   * The dog – at times, our brain has to supply missing information in order to recognize something. Sometimes we cannot copy information accurately. If someone cannot see the dog, they may have dissociation. More examples of how dissociation may occur are on the display board.
   * Vase/face – concentrate on one color and that shape will be dominant. The majority of people see light on dark quicker than dark on light.
   * Old lady/young woman – complicated drawings can cause us to see images that are really quite different from each other.
   * Duck/rabbit –what do you recognize first? Did you get frustrated trying to see the other image? Were you embarrassed when you were the only one who saw the rabbit and everyone else saw the duck? Did the others laugh at you? You were all correct.

These pictures demonstrate that not all people see things the same way. Learning differences can cause the mind to produce different images than what other people see.

1. Place an index card on your forehead and write your name on the card with a marker. This represents dysgraphia (difficulty writing by writing some letters backward).
2. Swing your left foot in a counter clockwise direction. While your foot is moving, write your name and address on a paper. This shows that you had to think hard about what you were doing even though it was a simple task. Some people have a difficult time doing two things at once. One example is the brain may have to work hard to remember how to write the letters and know how to spell the word. Another example is taking notes while listening to the lecture for understanding. **Activities for the Learning Differences Stations (cont.)**
3. Students stand in front of the mirror and do the activities described below. Before getting started, please be sure that the mirror is securely taped so that it does not slip and break. These activities illustrate how difficult it is to keep the paper neat when it is difficult to control the hand movement needed to connect the pattern. This simulates perceptual and coordination problems. These activities can be time consuming and frustrating. Do not allow the students to only do these activities during the ten-minute segment. Remember that people with learning disabilities often work slower and therefore do not finish their work. Let the students feel the time pressure as well as the frustration. These activities are best done last so you can role play that they only three minutes left to get this work done or they will have to take it home for homework.

* Work on the dot-to-dot activity, by **ONLY** looking in the mirror, not at the paper or their hands. The dot-to-dot numbers read correctly when facing the mirror. The activity shows what it is like to have perceptual problems. The numbers read incorrectly (like dyslexia and perceptual problems) when not facing the mirror. Either position is acceptable depending on how difficult you want to make the task for the students. This activity is extremely popular and sends a strong message.
* On the back of the same paper, each student should write his or her name and address while only looking in mirror. The name and address should appear correctly when reading it in the mirror. This activity is extremely difficult. It should be the last activity attempted during the ten-minute station. Most students will not have time for this activity.

Hint: Keep the papers a few inches away from the mirror. The task becomes easier as the paper moves closer to the mirror.

**Optional**

There is a display board for the Learning Differences station that offers more information. Encourage the students to look at the board if time allows.