**Speech Impairment**

Speech impairment may occur as a result of a muscular or neurological disease that affects how speech is spoken or understood. Being deaf or hard of hearing may also prevent a person from correctly hearing how words sound, therefore it is difficult for the person to duplicate the sound or hear their own voice. An accident may also cause speech impairment.

The purpose of speech is communication. Communication can occur by using word approximations, sign language, gestures and body positioning, facial expressions, picture exchange, writing words on paper, and electronic augmentative communication devices.

**Speech Disorders**

* Articulation errors: Changing the sounds through substitution, omission, distortion, or addition. Examples are "wabbit" for "rabbit" and "shied" for "sled". The spoken words are an approximation of regular speech.
* Stuttering: Uncontrolled repetition of a sound or word. This is a breakdown in the normal flow of sounds.
* Voice disorders: Types of speech sounds that interfere with the understanding of the intended message. A voice may be too high, too loud, or too soft. Extreme nasal, raspy, or monotone voices are also voice disorders.

**Language Disorders**

* Language delay: Difficulty using language appropriate for the age level.
* Impaired acquired language: Difficulty in making responses appropriate to the conversation. The person may try to respond, but is unable to find the appropriate words. The person’s response may seem inappropriate for the discussion or question.

**Activities for the Speech Impairment Station**

**Station #9**

1. Servox (electric larynx): Turn on the device, hold it firmly against the side of your throat, and mouth a sentence. Without making sounds, you should only be moving your lips and tongue. The device will make the sounds. People who cannot talk because their vocal cords have been removed use this device. Mention that smoking is the leading cause of vocal cord removal.

Hint: To get the correct area, hum while you feel your throat. The area on your throat that vibrates the most is where you should put the Servox. Place the Servox in its unplugged stand when not in use. This will prevent it from rolling off of the table during the workshop.

1. Multiple Messages Augmentative Communication Devices: Students may type out words on the Epson Real Voice. **DO NOT** allow the students to type random letters on the Epson. The computer inside the Epson translates whatever is typed. Therefore, it will try to pronounce these random letters. It will damage the computer program if it translates nonsense all day long. Students may press the picture buttons on the Blackhawk to speak to someone. A Dynamo may be available at this station. The Dynamo has a dynamic display for easy touch screen operation. Please be sure that the students handle all of these devices gently because they are very expensive. People who are non-verbal or have a difficult talking use these devices.
2. Single Message Augmentative Communication Device: Press the large button to hear the message. This message can be changed many times each day.
3. Look at the laminated communication book that is used to point out needs and give information. Ask the student to use the book to communicate a sentence.
4. Pretend to order a meal off the McDonald's picture menu. Be sure to accurately point out the items that you want. Notice that this menu does not offer exceptions such as no pickle. To order an exception, the customer may write the request, use their personal communication book or perhaps use an augmentative communication machine. Do you think McDonald's should change their menus to offer exceptions?

**Activities for the Speech Impairment Station (cont.)**

1. Say your name and address out loud with your tongue pressed firmly behind the bottom teeth. Listen to how it would sound if you had difficulty speaking
2. This activity demonstrates how much more effort is required to speak when you must think about how to move the muscles of your mouth.
3. Find a partner and try to read each other's lips. Use half of the words on the laminated index cards. Can the partner understand the words? Now switch and let the partner try with the other half of the cards.
4. When a patient cannot talk or speak the native language, a health professional may use a pain indicator to communicate. The patient points to the picture or number that describes how the pain feels.
5. Using the demonstration cards, try to fingerspell your name. Most students know something about this form of sign language. Therefore, this activity should be introduced last. Use it as filler until the bell rings, unless the volunteer happens to be fluent in sign language.

**Optional**

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

**Important**

The Epson, Blackhawk, Dynamo and Servox must be charged overnight daily. **Remember to repack the four chargers and turn off the four communication devices at the end of the workshop.**