



Suzanne M. Foley, M.S., Au.D., CCC-A
Doctor of Audiology

7440 N. Shadeland Avenue, Suite 115
Indianapolis, IN 46250

foleyaudiology@gmail.com

Phone: (317) 573-4445

Fax: (317) 489-3141

DICHOTIC LISTENING/INTEGRATION RECOMMENDATIONS

Dichotic listening difficulties are due to delays in the development of the auditory system specifically, in the transfer of auditory information from the left and right sides of the brain. The skills involved in dichotic listening include binaural integration and binaural separation. Binaural integration allows a student to listen to inputs from both ears and understand both signals and/or prioritize hearing in one ear and ignore what is heard in the other ear..

FUNCTIONAL IMPACT

Students with dichotic listening weaknesses may have trouble with:

- Hearing speech clearly in background noise. They will become overwhelmed with listening in background noise;
- Difficulty telling where sound is coming from that can impact safety;
- Short term auditory memory;
- Completing a verbal and motor task together such as listening and taking notes; and/or
- Overall developmental delays in language, fine and gross motor skills.

There are two aspects to treatment for dichotic listening difficulties. The first type is called ***bimanual movement***. This type of activity includes any movement that requires the right and left sides of the body to move independently. In particular, activities that require the right and left sides of the body to intersect the midline are helpful. The second type of activity ***requires a simultaneous verbal AND motor response***. This type of activity pairs a listening task or verbal response with a motor movement.

Bimanual (right and left arms/legs moving independently) activities can include sport activities such as gymnastics, tennis, golf, karate or martial arts, soccer, volleyball, ping pong or badminton. Dancing while singing (or juggling), playing piano or another musical instrument can be fun.

Verbal to motor activities include any activity where the student needs to listen to language and/or respond verbally while making a motor movement. The verbal response should be simple such as counting out loud or repeating a single word. The complexity of the verbal response is not important. Speech language pathologists can improve the interhemispheric transfer of auditory information by adding a motor response during therapy.

Recreational activities can include singing and dancing at the same time, Games such as Twister, Marco Polo, Simon Says, Musical Chairs, Red Rover, and Red Light/Green Light, and Name that Tune require a verbal or listening task combined with a motor movement. Informal activities can include tossing a ball back and forth from hand to hand while talking on the phone or singing.

With the introduction of activity based video games such as the Wii or Xbox 360 Intercept, games listed above can be done inside in inclement weather and at any time of the day. Games should be paired with a verbal response such as counting or repeating a word.

Home programming should be done 30 minutes per day for five days a week in six week increments. The activities are not as relevant as the intensity and consistency of the exercises. The activities should be fun and engaging.

Communication strategies should focus on reducing or minimizing listening in background noise, use of short instructions and academic support for possible weak auditory memory and difficulties with note taking.