

Using Music in Speech and Language Therapy Programs to Improve Communication and Social Interaction Skills

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Music can be used to facilitate the development of speech and language skills and is often used by speech-language pathologists in their therapy programs. Music helps to motivate students to become actively involved in learning. Moreover, the lyrics can be used to teach grammatical structures, to provide exposure to new vocabulary, to improve attention to auditory information, and to reinforce skills being taught through instructional programs.

The repetitive patterns in rap and rock music help children to remember information as they learn the lyrics and repeat the lyrics over and over, accompanied by a rap beat. Students love to sing, and the "speech practice" can be used to target speech sounds, to improve oral motor skills, and to promote language skills that are critical for academic success and for effective communication in social contexts.

The use of music to enhance the development of speech and language skills is supported in the research literature (Jentschke, 2009; Whipple, 2004). In a meta-analysis of research involving students with autism, Whipple (2004) found that the use of music in learning programs results in improved attention to task, more frequent verbalizations, improvements in vocabulary comprehension, increases in appropriate behavior during social interactions, and less frequent self-stimulatory behaviors.

Social communication skills have been found to improve when augmentative communication training (AAC) is paired with musical strategies (Herman, 1985). When music and speech accompanied the presentation of signs, children with autism learned signs more easily than when they were taught with music alone or speech alone.

The processing of music and language depend on some of the same systems in the brain. One brain system, located within the temporal lobes, helps individuals memorize information in both language (e.g., words and meanings) and music (familiar melodies). The other system, located within the frontal lobes, helps in the learning of rules that underlie music and language (Georgetown University Medical Center, 2007).

There are a variety of similarities in how language and music are structured. Both music and language have auditory, vocal, and visual aspects (e.g. written symbols) and both require knowledge of structural elements and rules.

Kraus and Chandrasekaran (2010) reported that music tones the body for auditory fitness, much like exercise promotes the development of body fitness. Music training helps build neural processes that are often deficient in individuals with severe reading disabilities or individuals who have difficulty hearing speech in noise. The effective processing of auditory information is critical for success in the academic curriculum. The development of musical abilities can facilitate the development of auditory processing and memory skills that are relevant to success in

social and academic contexts.

Unfortunately, many schools are eliminating music programs from the curriculum due to budget cutbacks. These cutbacks in musical training may be detrimental to the development of skills that will actualaly facilitate learning in the content areas of the curriculum. School professionals should incorporate music into their instructional programs, especially with students who are performing poorly. Music enhances motivation and the active involvement that is critical for efficient learning.

A variety of programs have been developed that use music to facilitate learning in students with special needs. Brief summaries of several programs that have been used with children who have communication disorders and/or other learning disabilities are summarized below. These programs are fun for children and target skills that are important for success in school and in social situations.

- **In Tune with Language** - This kit is designed for use in building vocabulary, problem solving, and storytelling skills. The songs reinforce the information being taught and help children to remember critical details from a short story. This program includes high-energy songs that help students relate to their needs, frustrations, and feelings of the story characters. Rap, rock, country and other musical styles are included. The kit includes a short story book, activity book, colorful picture scenes, and a CD with the songs. This program builds language skills and helps children to understand the needs and feelings of others.
- **Rap It Up**- The program includes ready to use raps that target specific language and literacy skills. It also includes rap rhythms that can be used to create original raps. The program makes it easy for children to develop their own raps in addition to using those contained within the program. .
- **Rap 'n Rock** - This program includes songs that target language and literacy skills commonly emphasized in classroom curriculum standards. The program helps students develop an understanding of grammatical structures (e.g., nouns and verbs), word relationships (e.g., opposites), story sequence, and other basic language and literacy skills. There are two volumes in this program.

To listen to segments from songs in popular instructional programs, [click here](#).

References

Buday, E.M. (1995). The effects of signed and spoken words taught with music on sign and speech imitation by children with autism. *Journal of Music Therapy*, 32(3), 189-202.

Georgetown University Medical Center (2007, September 27). Music And language are processed by the same brain systems. *ScienceDaily*. Retrieved January 28, 2012, from <http://www.sciencedaily.com/releases/2007/09/070927121101.htm>

Herman, F. (1985). Music therapy for the young child with cerebral palsy who uses Bliss-symbols. *Music Therapy, 5(1)*, 28-36.

Jentschke, S. (2009). Musical training modulates the development of syntax processing in children. *NeuroImage, 47*.

Kraus, N & Chandrasekaran, B. (2010, August). Music training for the development of auditory skills. *Nature Reviews Neuroscience, 11*, 599-605.

Whipple J. (2004). Music in intervention for children and adolescents with autism: A meta-analysis *Journal of Music Therapy, XLI (2)*, 90-106.