

## ***Down Syndrome News, Volume 27, Number 4***

### **Music Therapy Encourages Development**

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#### **What is music therapy?**

Music therapy uses music as a powerful tool to create positive behavior changes. A music therapist's main goal when working with a child with special needs is to assist the child in reaching his or her greatest potential. Music therapy can enhance development in areas such as social/emotional, cognitive/academic and fine/gross motor skills. Music interventions are chosen specifically to meet individual developmental goals such as improving hand/eye coordination or increasing verbal skills.

Although therapy participants can learn music skills, therapy goals do not focus on developing musical skills. Music therapists focus on the process of making music in contrast to a music educator whose main interest is on the final product. Focusing on the process means that there is no right or wrong response. This positive atmosphere allows children's self-esteem to grow along with their skills.

Music therapy can be provided in one-to-one, small or large group settings. Group sessions provide children with the opportunity to participate in sing-alongs, partner dances, passing games and structured settings for them to share creative ideas.

#### **Is music therapy new?**

No, during World War I, music therapy was used to assist war veterans with their rehabilitation goals. The American Music Therapy Association (AMTA) was founded in 1950 and now has nearly 3,400 registered members from across the country. The AMTA accreditation board assists the public in identifying qualified, professional therapists.

The organization that I work for, Fraser, was founded in the 1930s when Louise Whitbeck Fraser began using music to teach children with special needs. Seventy years later, music therapy is an integral part of our work with thousands of families each year.

#### **Where do music therapists work?**

Music therapists work in a wide variety of clinical and educational settings including: public and private schools, hospitals, rehabilitation clinics, psychiatric facilities, nursing homes, community mental health centers, prisons and hospice programs.

#### **How can music therapy help a child who has Down syndrome?**

Music therapy can be powerful in the life of a child who has DS. The music therapist evaluates the child to assess his or her strengths and areas of concern. Music therapy

goals often overlap and reinforce skill areas which are being addressed during the child's other therapies. When possible, the music therapist collaborates with other professionals who are working with the child. For example music therapy activities could complement occupational therapy sessions for a child working on increasing hand strength. The music therapist would use a variety of instruments, beginning with tapping a drum or tambourine with the palm of the hand, to grasping the handle of a maraca or set of rhythm sticks. The weight of the instrument used would increase as the child's strength improved. Eventually, pushing piano keys or strumming guitar strings could strengthen individual fingers.

Through research, we know that speech and language development originate in the left hemisphere of the brain and musical stimuli is generally processed in the right hemisphere (Love & Webb, 1992). This helps to explain why many children with speech and language difficulties respond to language more quickly when displayed through music. For these children, vocalization could be increased through a variety of activities. Therapy could begin with singing syllables to familiar tunes. The therapist would sing the words leaving out the last word of the phrase and the child would attempt to fill in the missing words. For example: "Twinkle, twinkle, little \_\_\_\_." First attempts may be by gesture, a nod of the head, a clap of the hands, but soon a vocalization will replace the gesture. One reason this approach is so successful is because the expectations are clear. The lyrics in the song remain the same so the child understands exactly what is expected.

In physical therapy, a child works on improving muscle tone, coordination, and balance. Movement activities would be incorporated into music therapy to encourage the child to bend, stretch, jump, march, balance, tip toe, etc. To enhance the movement, props such as scarves, pom poms, and parachutes might be used.

The use of music and rhythm can energize and organize a child's environment and encourage the child to participate. Music may also be used to relax a child when an environment becomes over stimulating.

### **Bret**

As a toddler, Bret attended Fraser School and participated in group music therapy sessions with his class once a week. Following his second birthday, Bret's parents enrolled him in individual music therapy sessions so he could work on goals tailored for his development.

Initially, Bret's music therapy goals focused on increasing his vocalizations. He enjoyed songs about animals and quickly attempted to imitate animal sounds while singing "Old McDonald" and "Down on Grandpa's Farm." To help Bret learn how to control his tongue, singing games were done in front of the mirror. This allowed him to see the frequency his tongue was protruding from his mouth and how closely he was mimicking the therapist's actions.

A year later, as Bret's attention span increased, his weekly 15-minute therapy session was increased to 30 minutes. His therapy was expanded to include songs with actions, allowing him to learn how to identify body parts, how to follow directions and additional imitation skills.

The following year, Bret's goals centered on strength. A variety of hand-held rhythm instruments were introduced to increase his hand strength. Bret was also developing his hand-eye coordination as he manipulated these instruments to make music. His gross motor skills also began emerging at this time, so dance activities incorporating marching, jumping and balance became part of his weekly sessions.

As Bret's language continued to blossom, focus turned toward fostering expressive language. Singing short phrases and increasing his articulation became key points addressed during therapy. Songs with repetitive lyrics provided lots of practice opportunities. In addition, slide whistles and harmonicas were played to enhance breath support. Academic concepts such as shapes, colors and the ABCs also were highlighted to encourage development.

Today, as Bret prepares to enter kindergarten, his music therapy consists of learning tools to broaden his social skills and encourage additional spontaneous speech. He also will be given the opportunity to invite a peer to join him in his music therapy sessions. Bret always greets the therapist with a warm smile and "Let's play!" The only resistance is when it's time to sing "Goodbye."