

From ADD to OHI to the IEP:

Music Therapy Techniques to Build Success in Your Instrumental Music Programs

Amber Weldon-Stephens, EdS, MT-BC
Music Therapist, Fulton County Schools
Atlanta, GA
stephensa@fultonschools.org

Jay Wucher, Coordinator of Music Education, Retired
Fulton County Schools
jswucher@charter.net

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Overview of Exceptionalities and Instrumental Music Considerations

Attention Deficit Hyperactivity Disorder

Defined:

ADHD is characterized by difficulty in maintaining attention, limited ability to concentrate, impulsive behaviors, and hyperactivity. These symptoms can be a serious challenge to academic instruction, social relationships, and classroom management. It is estimated that 3-5% of school-aged children may have ADHD, with boys outnumbering girls about 5:1 (U.S. Department of Education, 2002). The cause of ADHD is generally considered to be biologically based, neurological, or inherited (Turnbull et al. , 2001).

ADHD is not considered a separate disability under IDEA (U.S. Department of Education, 2002). Behaviors exhibited by students with ADHD are often disruptive, and , as a result, are susceptible to interventions used with students who have behavior disorders as well as interventions with students with

learning disabilities (Adamek & Darrow, 2005). Please see LD and BD/ED for characteristics and techniques.

Other Health Impaired

Defined:

OHI refers to people who have limited strength, energy or alertness that affects their ability to learn in a normal classroom. This can range from attention deficit disorder (ADD), to serious life threatening diseases like cancer or HIV. Some of these disorders are present at birth, such as sickle cell anemia, asthma, hemophilia or epilepsy while others are caused by acquired conditions such as lead poisoning or rheumatic fever. The category is broad and a person does not necessarily need special education just because they have the condition. To be considered under OHI the condition must negatively affect a child's ability to learn (Adamek & Darrow, 2005).

Autism

Defined:

Autism is a developmental disability generally occurring within the first 3 years of life. Considered a neurological disorder affecting the functioning of the brain, the behaviors manifested may include impaired social interaction, impaired verbal and nonverbal communication, repetitive body movements such as rocking or hand flapping, unusual responses to people and objects, and resistance to change. Autism is defined by a set of behavioral criteria and results in persons falling somewhere on an autistic continuum. This also allows for autistic-related disorders including Autistic Disorder, Rett's Syndrome, Childhood Disintegrative Disorder, Asperger's Syndrome, and Pervasive Developmental Disorder Not Otherwise Specified.

Characteristics may include:

- Impaired speech
- Echolalia
- Repetition of words, unrelated phrases
- Impaired social interaction
- Lack of social interaction
- Abnormal voice inflection
- Nonresponsiveness or aversion to touch
- Resistance to change or routine
- Dependency on a set schedule
- Abnormal mood swings
- Impaired skilled motor function
- Ritualistic or stereotypical behavior such as clapping, hand flapping, finger flicking, and rocking

- Abnormal fascination or preoccupation with inanimate objects
- Impaired cognitive functioning
- Self-injurious behavior

Music Therapy Approaches:

Objectives might be aimed towards developing attention span, developing appropriate social interactions and communication, developing tolerance for sensory input, developing acceptance of change, and improving body awareness.

Instrumental Music Interventions/Techniques/Considerations:

- Provide a structured environment
- Decrease auditory stimulation (move them further away from the battery)
- Decrease visual distractions (lower the lights for example)
- Redirect for self-stimulating activities
- Provide opportunities to develop skills and strategies for appropriate social interactions
- Pair with a “buddy”
- Provide alternate communication devices (Use of yes/no cards, pictures, signs & gestures)
- Use pictures and visual aids
- Provide opportunities for “choices” by the student
- Use age appropriate music
- Provide physical assistance (as appropriate) when playing instruments as a good model to imitate

Hearing Impairments

Defined:

There are four types of hearing loss: Conductive Hearing Loss, caused by diseases or obstructions in the outer or middle ear; Sensorineural Hearing Loss, caused by damage to the delicate sensory hair cells in the inner ear or nerves; Mixed Hearing Loss, involving problems of the outer or middle ear, and the inner ear; Central Hearing Loss, caused by damage to the nerves or nuclei of the central nervous system. Persons said to be “hard of hearing” have some degree of hearing loss, but can still decipher speech and process language. Others who are considered “deaf” may detect some sounds, but it has no meaning for them. The onset of deafness varies with the individual and may affect the individual’s language development. The amount of hearing loss is measured in degrees by decibels (dB) ranging from slight loss (from 27 to 40 db) to profound loss (91dB or more).

There are several different forms and symbol systems for communication used by Deaf and Hard of Hearing persons, each representing different philosophies.

These include American Sign Language, Fingerspelling, Manual Communication (a combination of sign language and fingerspelling), Oral Communication (speech and speech-reading), Cued Speech, Simultaneous Communication (speech, signs, and fingerspelling), and Total Communication (use of all methods).

Characteristics may include:

- Impaired verbal communication skills
- Impaired speech fluency and vocal tone quality (affecting pitch, control, volume, rate, breath control, stress and inflection)
- Isolation and loneliness
- Problems with equilibrium

Music Therapy Approaches:

Objectives might focus on linguistic, behavioral, academic, motor skills, social interaction and self-concept.

Instrumental Music Techniques/ Interventions/Considerations:

- Reduce or eliminate unnecessary noises
- Provide good lighting
- Provide good seating arrangement with close proximity to the teacher
- Make sure speaker's face is clearly seen
- Speak slowly and clearly (not exaggerated or overemphasized)
- Avoid unnecessary pacing
- Provide assistive communication devices as necessary, such as microphones; Use of visual aids – paper and pencil, overhead projectors, diagrams, charts, etc.;
- Repeat questions or statements from class
- Provide opportunities for increased social interaction
- Remember these individuals are more responsive to rhythmic aspects than tonal aspects
- Use drums and percussive instruments as useful media to transmit vibrations
- Use sustaining instruments such as timpani to assist with sound detection and discrimination.
- Provide singing and vocalizing opportunities to assist with appropriate verbal inflection and fluidity
- Wear a stereo microphone (when appropriate) for those with implants

Visual Impairments

Visually Impaired may refer to individuals who are legally blind, or who are partially sighted. Legally blind refers to a visual acuity of 20/200 or less in the

better eye after correction. Partially sighted individuals have a visual acuity of between 20/200 and 20/70 in the better eye after correction.

Characteristics may include:

- Lack of confidence
- Lack of freedom in movement
- Slow progress
- Self-focused
- Anxiety and insecurity
- Easily frustrated
- Lack of socially acceptable outlets for emotional expression
- Increased compensatory skills (such as heightened auditory skills or good memory)

Music Therapy Approaches:

Objectives may be aimed at developing body awareness, spatial awareness, and gross motor skills, developing auditory skills, increasing self-esteem, and providing an appropriate expressive outlet.

Instrumental Music Techniques/ Interventions/Considerations:

- Provide printed materials which are large - black letters that contrast with background
- Provide large, simple, and uncluttered visual aids
- Label instruments with Braille letters (as appropriate and when possible)
- Provide opportunities to explore instruments kinesthetically and aurally
- Reinforce with tactile experiences when possible

Intellectual Disabilities

Defined:

Intellectual Disabilities refer to individuals with below-average intellectual functioning. Classifications are defined in terms of an Intelligent Quotient, with Moderate Intellectual Impairment being an I.Q. of 35-40 to 50-55, Severe Intellectual Impairment being an I.Q. level of 20-25 to 35-40, and Profound Intellectual Impairment being an I.Q. level below 20-25. Mild Intellectual Impairment would be an I.Q. of 55 to just below normal (70-80). The causes of Intellectual Disabilities can be a result of congenital and genetic disorders, or a host of other non-genetic causes ranging from malnutrition, neglect, prenatal exposure to drugs/alcohol, difficulties during labor/delivery, post-natal infections, or head injuries. Common terms for some intellectual disabilities include Down Syndrome (I.Q. in the Moderate range) and Fragile X Syndrome (I.Q. in the Severe range).

Characteristics may include:

- Poor academic achievement
- Memory deficits
- Decreased attention span
- Poor social development
- Low self-esteem
- Difficulty with appropriate daily living skills
- Impaired balance
- Delayed or deviant language development
- Impaired or slow speech

Music Therapy Approaches:

Objectives will vary depending on the severity of the disability. However, common objectives might focus on gross and fine motor coordination, spatial perception, reading recognition and comprehension, body image, self-help skills, impulse control, social skills, leisure time skills, daily living and work skills, frustration tolerance, and attention span.

Instrumental Techniques/ Interventions/Considerations:

- Provide close proximity to teacher
- Assign a peer buddy
- Provide room for wheelchair accessibility
- Use augmentative devices if the student has one for communication
- Provide opportunities for appropriate social involvement
- Percussion section is a good alternative for these students
- Change the opportunities to keep a steady beat with different instruments
- Provide positive feedback for following directions and staying on task
- Provide many visual cues

Learning Disabilities

Defined:

Public Law 101-476, the Individuals with Disabilities Education Act (IDEA) defines a learning disability as a “disorder in one or more of the basic psychological processes involved in understanding or in using spoken or written language, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations.” Learning Disabilities, also referred to as Speech-Language Disorder, includes such conditions as attention-deficit hyperactivity disorder, dyslexia, hyperlexia, developmental aphasia, and brain injury. Learning Disabilities do not refer to learning problems that are result of other conditions such as visual, hearing, or motor impairments, Intellectual Disabilities or emotional disturbances. Persons with a learning disability can have average or above average intelligence.

Characteristics may include:

- Short attention span
- Difficulty following directions
- Poor memory
- Easily frustrated
- Impulsivity
- Coordination problems (appearing “clumsy”; problems with fine motor activities)
- Hyperactivity
- Difficulties with sequencing; skipping steps
- Poor reading ability and comprehension
- Difficulty distinguishing between and among letters, numbers, or sounds
- Lack of fluidity in speech
- Attention seeking behaviors
- Learned “helplessness” (“This is too hard.” “I can’t do it.”)

Music Therapy Approaches:

Objectives might be aimed towards building self-esteem, developing auditory processing skills, increasing attention span, enhancing speech and language skills, improving fine and gross motor skills, promoting academic concepts, developing appropriate social skills, and expanding leisure-time activities.

Instrumental Music Techniques/Interventions/Considerations:

- Provide close proximity to the teacher
- Reduce or eliminate distractions in the environment
- Provide frequent positive feedback
- Use overhead projector when applicable to teach notation
- Be consistent
- Be repetitive
- Modify color, size, modality, and pacing in learning:
 - use color to denote changes in music and color code notes
 - use a high-lighter to attend to certain parts
 - simplify music, making it larger and bolder
 - provide various modalities in teaching same concept
 - allow for hands-on examinations of materials and equipment
 - provide a word bank for written assessments
 - allow extra time for assignment
 - provide step-by-step directives
 - provide frequent review of concepts
 - initially separate rhythmic and melodic elements
 - separate learning into smaller pieces
 - allow extra time for responding to questions
 - pair with a buddy

Orthopedic Impairments

Defined:

Orthopedic impairments refer to a type of motor dysfunction that interferes with the functioning of the bones, muscles, or joints of an individual. Generally they refer to medical problems and do not refer to interferences with intellectual functioning. These impairments can be of a neurological type affecting the Central Nervous System. Impairments of this type include Multiple Sclerosis, Spina Bifida and spinal cord injuries. Orthopedic impairments can also involve the skeletal system and include Cerebral Palsy, Muscular Dystrophy, Juvenile Rheumatoid Arthritis, amputations, and congenital malformations. Orthopedic impairments can be a result of congenital or adventitious (acquired) conditions.

Characteristics may include:

- Poor social skills
- Poor motor coordination
- Poor balance
- Poor range of motion
- Grasping difficulties
- Difficulty functioning independently
- Poor muscle tone
- Impaired breathing
- Poor self-esteem
- Poor communication
- Uninhibited primary reflexes
- Need for assistance in activities of daily functioning
- Performance below academic grade level

Music Therapy Approaches:

Objectives might be aimed towards improving movement/range of motion, relaxation exercises, increasing appropriate social interactions, increasing self-esteem and body awareness, improving communication skills, and self-expression.

Instrumental Music Techniques/Interventions/Considerations:

- Use communication and augmentative devices when applicable
- Provide room for wheelchair accessibility
- Provide opportunities for socialization and group interaction
- Adapt tools and devices as necessary
- Assist physically as needed when playing instruments

Emotional/Behavioral Disorder

Defined:

Behavioral problems are very difficult to identify and define. They can refer to a wide range of emotional disorders including depression, affective disorder, anxiety disorder, and schizophrenia. For the purposes of this discussion, the writer will try and limit this to the specific categories of behavioral and conduct disorders. Generally any definition relies on descriptions and characteristics of the behaviors, but does refer to behaviors that fall outside of the realm of socially accepted “normal” behavior. These behaviors are long-term and persistent, and are generally unresponsive to direct interventions applied in general education.

Characteristics & Definitions may include:

Behavior disorder--

- School learning problems
- Unsatisfactory intrapersonal relationships
- Inappropriate behavior and feelings (to a given situation)
- Pervasive unhappiness or depression
- Physical symptoms or fears associated with school or personal problems

Oppositional Defiant Disorder –

- Negative, hostile, disobedient behaviors
- Defiance
- Irritability
- Vindictiveness
- Swearing, use of obscenities
- Low self-esteem
- Blaming others
- Disruptions; creating problems between others
- Mistrust of authority figures

Conduct Disorder--

- Persistent pattern of antisocial behavior
- Inability to function within school, family or social environments
- Hyperactivity
- Impulsivity
- Irritability
- Destructiveness
- Blaming others
- Theft
- Use of alcohol or drugs
- Arson
- Running away

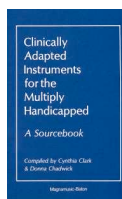
Music Therapy Approaches:

Objectives might be aimed towards exploration and appropriate expression of feelings, values, ideas, and opinions, socialization, problem-solving, self-esteem, relaxation techniques, and development of appropriate leisure time outlets.

Instrumental Music Interventions/Techniques/Considerations:

- Provide structured environment
- Be consistent
- Plan for transitions to and from classroom
- Develop plan for behavior modification with fixed set of rewards and consequences; develop behavioral contract
- “Interpret” and reflect presenting behavior (“Sounds like you are really angry right now...”)
- Validate feelings
- Process through problem area
- Have available time-out area, away from other students if possible
- Be non-confrontational
- Avoid arguing
- Provide choices
- Provide appropriate ways to release anger
- For oppositional defiance –
--Avoid direct positive reinforcement. Use indirect reinforcement such as whispering supportively, leaving notes, and/or providing rewards.

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American Music Therapy Association (AMTA)

<http://www.musictherapy.org/>