

# Perceptions, Participation and Applications for Students with Diverse Learning Needs in Music

Peggy Alpeter, Elementary Band Director  
 Cheyenne Mountain District 12

Catie Holton, MM, Music Therapist – Board Certified  
 Signature Music Therapy Services

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# About Us




Peggy Alpeter, Band Director  
 Pinon Valley and Cheyenne Mountain Elementary School  
 4<sup>th</sup>- 6<sup>th</sup> Grade Bands  
 Cheyenne Mountain District 12





Catie Holton, MM, MT-BC  
 Owner and Board Certified Music Therapist



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# RAISE OF HANDS...



Are you a parent of a diverse learner?  
 Are you a teacher working with diverse, differential and special needs students?  
 Do you have an understanding of music?  
 Are you in leadership?

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MY BELIEF

... as a teacher, I am constantly redirecting my approach to teaching, always adapting to the current circumstances and uniqueness of every child.

... I am capable of influencing others beyond the four walls of my classroom

... that my influence on a student is just as important as the influence that the student has on me in the never complacent flow of education

February 23, 2013  
Walt E. Cooper, Ed.D.  
Superintendent  
Cheyenne Mountain School District  
1775 LaCade Street  
Colorado Springs, CO 80905

Dear Dr. Cooper,

It is with deepest appreciation that we write this letter to you regarding our daughter **██████████** participation in the district's Instrumental Music Program during the last three years. **██████████** is a very special child with autism and has been enrolled in the Special Education Program since the second grade.

It has been our wish that **██████████** participate in the full range of educational and social opportunities in elementary school, including the Instrumental Music Program. Though, we have elected to pull **██████████** from School Band this year as we felt that the other students' talents has reached the next level. **██████████** has had a rich and meaningful experience during her years in the band.

Many people made her years in the School Band meaningful for **██████████** and our family -- most notably, Mrs. Peggy Alpeter, Band Director. We will never forget Mrs. Alpeter's passion, enthusiasm and kindness. She always kept Sidney involved as one of the percussionists for the band and gave her many opportunities to shine.


It is also important recognize **██████████** **██████████** Pikes Valley Elementary School, and many of her special education peers over the years. Since our "Cotton Elementary School days" it was often **██████████** who would stand behind **██████████** on stage for plays and music performances, prompting and encouraging her to stay on task -- providing us the comfort that **██████████** would not suddenly get taken up by the excitement of the moment and go tearing off across the stage.

We would also like to thank many of **██████████** classmates over the years for taking her by the hand or showing kindness, compassion and understanding during these performances. It was through their grace and maturity that the evening would transcend in our hearts to something much more than a simple music performance. Smiles would spread across our faces and tears would spring up in our eyes...truly happy for **██████████** and ourselves.

Again, thank you and your amazing staff, educators, and volunteers for making the School Band one of the most special and enriching experiences in **██████████** life.

Sincerely,

OUR STORY



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- Music elements
- Why music?
  - Music and neuroscience basics
  - Connecting music to day to day activities
- Consultation Program Overview
  - Implementation and Adaptive Ideas
- Resources
- Q & A

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### Music Elements

- Notation
  - Music symbols and expressions
- Tempo – 
  - Speed
- Instrument families

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## MUSIC AND NEUROSCIENCE

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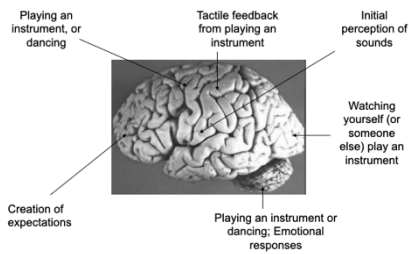
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“It is now known that music listening, performing, and composing engage regions throughout the brain, bilaterally, and in the cortex, neocortex, paleo-, and neocerebellum”  
Levitin & Tirovolas



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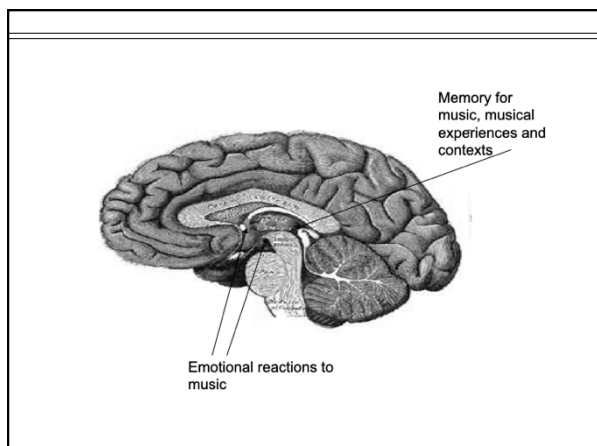
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### Why Music?

- Shared Networks
- Extended Networks
- Optimized Networks
- Engagement and motivation
- Requires less cognitive effort

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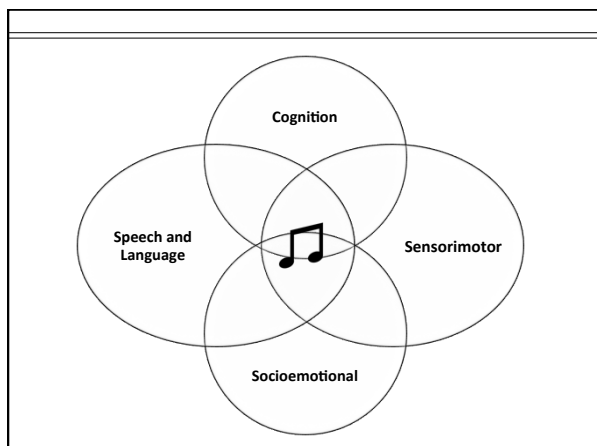
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## Cognition

### cog·ni·tion

/ˌkɑɡ nɪʃ(ə)n/

*noun*

the mental action or process of acquiring knowledge and understanding through thought, experience, and the senses.

How does this relate to music?

- Attention
  - As you're reading music, musical cues, individual parts
- Academic
  - Music symbols, note names, key signatures
- Memory
  - Recognition
  - Mnemonics

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## Sensorimotor

### sen·so·ri·mo·tor

/ˌsen(t)səreɪˈmɒdər/

*adjective* PHYSIOLOGY

(of nerves or their actions) having or involving both sensory and motor functions or pathways.

How does this relate to music?

- Gross and fine motor movements
  - Playing instruments
- Coordination
  - Unilateral, bilateral, crossing midline
- Vibration and stimulation
- Rhythm

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### Optimizing



Without rhythm →

With rhythm →

Channel 1  
Triceps EMG  
Trial 1

Channel 1  
Triceps EMG  
Trial 2

FIGURE 6

Sample EMG traces of triceps activity from the same subject in the no rhythm condition (Trial 1) and in the rhythm condition (Trial 2). Trial 2 shows decreased variability in duration of triceps activity.

Thaut, M.H., Schleiffers, S., & Davis, W.B. 1991. Analysis of EMG activity in biceps and triceps muscle in a gross motor task under the influence of auditory rhythm. *Journal of Music Therapy*, 28, 64-88.

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### Speech and Language

Language is different from speech.

Language is made up of socially shared rules that include the following:

- What words mean (e.g., "star" can refer to a bright object in the night sky or a celebrity)
- How to make new words (e.g., friend, friendly, unfriendly)
- How to put words together (e.g., "Peg walked to the new store" rather than "Peg walk store new")
- What word combinations are best in what situations ("Would you mind moving your foot?" could quickly change to "Get off my foot, please!" if the first request did not produce results)

Speech is the verbal means of communicating. Speech consists of the following:

**Articulation**  
How speech sounds are made (e.g., children must learn how to produce the "r" sound in order to say "rabbit" instead of "vabbit").

**Voice**  
Use of the vocal folds and breathing to produce sound (e.g., the voice can be abused from overuse or misuse and can lead to hoarseness or loss of voice).

**Fluency**  
The rhythm of speech (e.g., hesitations or stuttering can affect fluency).

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### Speech and Language

How does this relate to music?

- Sound versus silence
- Controlled inhale and exhale
- Articulation
- Pitch
- Rate of speech

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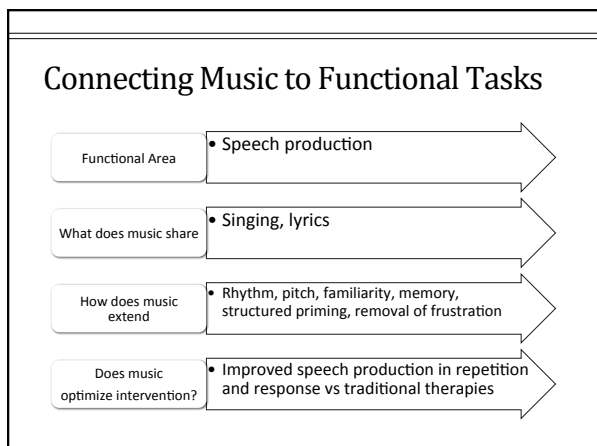
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### Social / Emotional

**Q:** How do you explain socio-emotional development?

**A:** QUICK ANSWER  
 Socio-emotional development is the development of a child's experience, expression, management of emotions, and ability to create relationships. According to the California Department of Education, the development of a child's socio-emotional capacity is important because it encompasses both intrapersonal and interpersonal processes.

How does this relate to music?

- You tell me!

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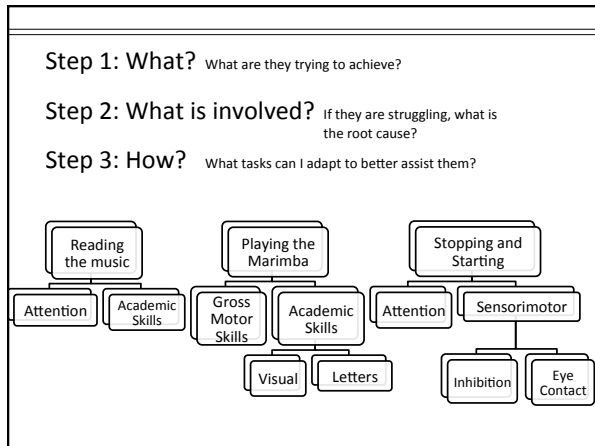
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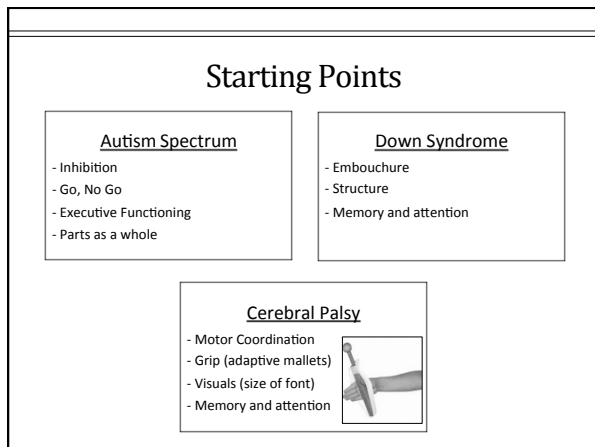
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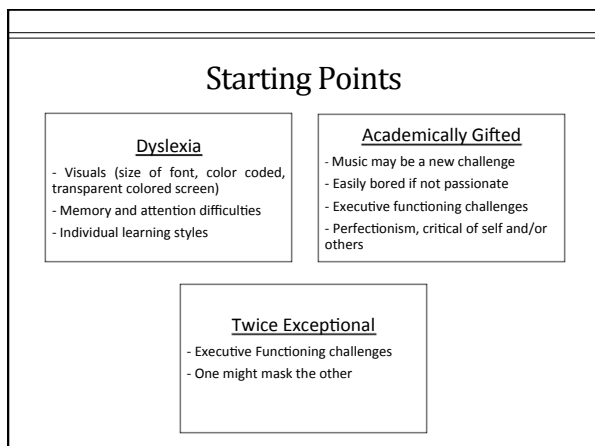
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## CONSULTATION PROGRAM

### Benefits of Music Participation

- Focus
- Coordination of body and brain
- Cognition
- Sensory integrative development
- Socialization
- Enjoyment

### Observation Notes

#### Instrumentation

- Basket of instruments (hand drums, shakers) to choose from
- Marimba with a red sticker on a bar indicating which one to strike

#### Visual aids

- Placed on the stand in front of them
- Indicated quarter note rhythms and rest rhythms
- Instructions to watch, listen, or play

One task throughout the length of the class

### Consultation

- Variety
- Information about the students
- Goals
- Routine
- Adaptations

Student Information Form  
Pinon Valley Music Therapy

**Demographic Information**

Student Name: \_\_\_\_\_ Grade: \_\_\_\_\_  
Teacher: \_\_\_\_\_  
Teacher Email: \_\_\_\_\_

Please list the therapists and teachers who are involved in the student's education:

Therapist:	Specialist:
Therapist:	Therapist:
Therapist:	Therapist:
Therapist:	Therapist:
Therapist:	Therapist:
Therapist:	Therapist:

**Academic/Cognitive Information**

Is this student currently reading? ☐ Yes ☐ No  
If yes, what grade level? \_\_\_\_\_ If yes, what can they? \_\_\_\_\_

Please comment on the student's current abilities in the following as you are best aware:

Counting ability: \_\_\_\_\_

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### ADAPTIVE EXERCISES

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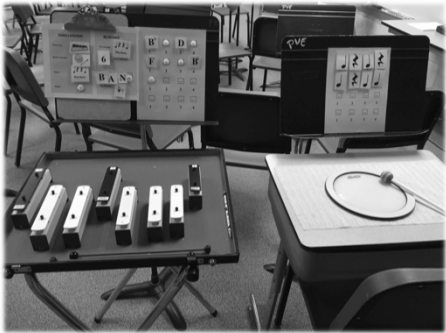
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Warm - Ups



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Scales

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Sequencing

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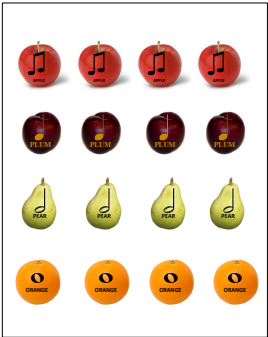
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Rhythms

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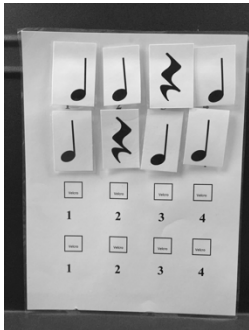
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Rhythms



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Notes on the Staff

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## Enlarged Notes

Finale v25

- Alpha Notes
- Enlarged Notes
- Emojis




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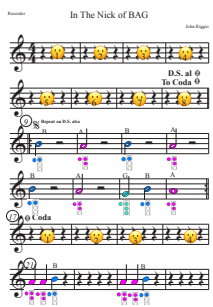
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## Color Coded Notes

- Color coded notes
- Note names
- Emoji




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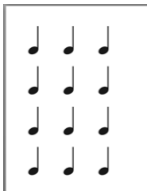
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## Additional Exercises





**Tucker's Schedule**

When To	Repeat
When To	Repeat
When To	Repeat
When To	Repeat
When To	Repeat

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### Additional Exercises

G	G	G	G
G	G	G	G
G	G	G	G
G	G	G	G
G	G	G	G

■	■	■	■
■	■	■	■
■	■	■	■
■	■	■	■
●	●	●	●

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Goal / Motivation

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### Kazoo



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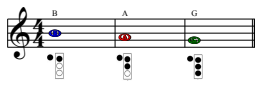

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### Color Coded Notes

Color coded notes coordinated with self-adhesive hole reinforcement labels on recorder/clarinet.

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### Other Instruments

- Percussion
  - Apps on iPad
  - Drums
  - Melodic
    - No fault set-up, size options

[www.westmusic.com](http://www.westmusic.com)  


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### Other Instruments

- Wind Instruments
  - Positioning differences, feelings of reeds, buzz sound for brass, octave difference
- String instruments
  - Size, positioning, vibration
- Piano
  - find the word for can be simple or can be complex
  - acoustic versus keyboard
  - bass and treble, right hand and left hand, individual finger movement
- Voice

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### Choice of Instrument

- Modifications to Music
  - Volume consideration
  - Type of mallet/instrument being played
  - Rhythm
- Continual Adaptations
- Safety

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### TIPS AND TRICKS

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### If at first you don't succeed...

- Speaking "music-ese"
- Motivations and goals
- Transitioning environments
- PARAs

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## Collaboration

- Work with the entire team of school professionals
- Copy of IEP and 504
- Music Therapists (Board Certified)
- Support Staff
  - Speech Language Pathologists
    - Many speech issues are relevant to articulation issues ("T" - tongue thrust, anchor tongue)
    - Sometimes the speech therapist is working on the same issues, so using the same vocabulary is helpful for the child
    - Other times, one may work against the other
    - "Mouth" puppet is helpful for tongue placement
  - Literacy Interventionists
    - Learning styles
- Budget

## QUESTIONS?

Peggy Alpeter  
Alpeter@cmsd12.org

Catie Holton  
Catie@SignatureMusicTherapy.com  
[www.SignatureMusicTherapy.com](http://www.SignatureMusicTherapy.com)

## RESOURCES

## Visual Impairment

<http://louis.aph.org/catalog/CategoryInfo.aspx?cid=152>

- American Printing House for the Blind maintains Braille, large print, audio and other specialized format materials - including Band Method Books.
- Example: Essential Elements Book 1 and 2 large print

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## Virtual Music Making

- Adaptive Use Music Instruments (AUMI)**
  - AUMI uses the front facing camera to facilitate student music making through body motion.
- The Beamz System**
  - Beamz app works on iPad with little effort, students can trigger a sound or response by touching a representation of a beam.
- Skoog**
  - A tactile music interface
  - There are 5 sides on the Skoog, each side plays a different note. Press or squeeze anywhere on its sides, edges and corners to create music




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## Music Education

**Exceptional Music Pedagogy for Children with Exceptionalities**  
 Edited by Deborah VanderLinde Blair & Kimberly A. McCord  
 Oxford University Press

**kids, music 'n' autism: Bringing out the Music in Your Child**  
 Dorita S. Berger  
 Jessica Kingsley Publishers

**Music & Dyslexia: Opening New Doors**  
 Edited by T.R. Miles & John Westcombe  
 Whurr Publishers

**Teaching Music to Students with Special Needs**  
 A Label-Free Approach  
 Alice M. Hammel & Ryan M. Hourigan  
 Oxford University Press

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<p><b>Music Therapy</b></p> <p>Colorado Association for Music Therapy <a href="https://www.musictherapycolorado.org/">https://www.musictherapycolorado.org/</a></p> <p>American Music Therapy Association <a href="https://www.musictherapy.org/">https://www.musictherapy.org/</a></p> <p>Signature Music Therapy Services <a href="https://www.signaturemusictherapy.com/">https://www.signaturemusictherapy.com/</a></p>
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