

We Already Teach More Than Music: Interdisciplinary Approaches for All

Ms. Amy Novick - Midwest Clinic, 2005 - Sponsored by National-Louis University

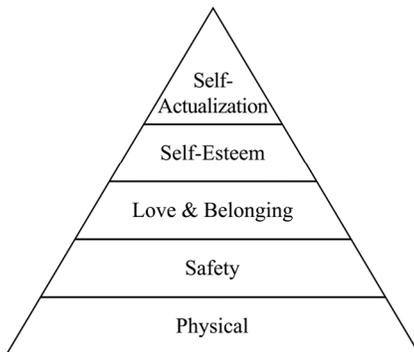
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- ✓ We EDUCATE students THROUGH MUSIC, not only in music.
- ✓ Participating in a musical ensemble is an AUTHENTIC EXPERIENCE through which we teach FINE ARTS, ACADEMICS and SOCIAL SKILLS.
- ✓ By changing or adding to your VOCABULARY and using ANALOGIES, you can acknowledge all of these SKILLS and KNOWLEDGE.
- ✓ TEACH EVERYTHING you know, not just music.

STAGES OF GROUP DEVELOPMENT

Just as *Maslow's Hierarchy of Needs* must be attended to for an *INDIVIDUAL* to be successful, the *Stages of Group Development* must be attended to, for a *GROUP* to be successful.

Maslow's Hierarchy of Needs



Stages of Group Development			
<i>Questions to Assess Group Development and Effectiveness</i>			
<u>Stage 1</u> Facilitating Psychological Membership	<u>Stage 2</u> Establishing Shared Influence	<u>Stage 3</u> Pursuing Academic Goals	<u>Stage 4</u> Recognizing Conditions of Self-Renewal
<p>Are there procedures to get to know everyone?</p> <p>Is it all right for students to express their fears, concerns, and ideas?</p> <p>Do students and the teacher listen to one another?</p> <p>Do students interact with a variety of classmates?</p> <p>Is there sensitivity to and appreciation of the different needs and styles of others?</p>	<p>Can the students take constructive leadership?</p> <p>Can leadership be shared and rotated?</p> <p>Are new and different ideas listened to and evaluated?</p> <p>Are conflicts openly recognized and discussed?</p> <p>Are the skills of all members being used?</p>	<p>Are individual differences respected?</p> <p>Are students motivated to study?</p> <p>Can the group set some long-range goals?</p> <p>Do students support one another in learning?</p> <p>Is there a balance between group and individual accountability?</p> <p>Can problems be specified and resolved?</p> <p>Can conflict be used creatively?</p>	<p>Can the group evaluate its own effectiveness?</p> <p>Can the group solve its own problems?</p> <p>Can individuals evaluate themselves and set goals for personal improvement?</p>

SIMPLE INTERDISCIPLINARY ASSIGNMENTS

MATH

- Draw a picture, table, or graph depicting the relative proportion of note values.
- Assign music note-value worksheets: add note values, draw bar lines in appropriate places, complete the measure with the missing note, balance the scale, values of ties (add), values of dotted notes (multiply).
- Plot 8 measures of a melody on graph paper. Time/Rhythm on the X-axis Pitch on the Y-axis.

MATH & ART & LANGUAGE

- Use one basic pattern (of any kind) and draw it in sequence, retrograde, elongation and diminution.
- Write an 8-24 measure composition using a specific form.
- Write a poem or lyrics to a song using one of these forms.

ART

- Describe all the patterns in the room.
- Bring in pictures or fabric with patterns on them. Make a class collage.
- Draw shapes or use objects to make five patterns of your own.
- One person uses students to make a human pattern and others guess what it is.
- Using any objects, draw ABA, AABA, ABACA, and Theme and Variations forms.
- Draw objects to represent the form of the piece (Especially good with pop or folk music.)
- Visual Dictation (short rhythms/melodies): Draw something to represent what you hear.
- Draw a contour in a blank space, then write a new melody on a staff to match that contour.
- Create your own music notation; make a legend for it; and rewrite 8 measures of music using it.
- Listening (whole pieces): Draw a picture or scene to match the mood of the music you hear, and/or use appropriate colors. (Especially good to do with program music *before* you tell them the title. Have students compare results on a bulletin board.)

GEOGRAPHY

- Have students use line, measure, and/or beat coordinates when describing a place in the music.
- Students should make a Legend, listing all the symbols and words in their ensemble music. Define the items that they can, and fill in the rest as they learn their pieces. Use this as their study guide for a written Vocabulary and Concept quiz.

READING

- Point to each note you as say it, or have a partner point while they read aloud or play the excerpt.
- Classroom, section, or partner read-alouds in tempo using note names, letters, values, fingerings or stickings.
- Pre and post-tests and/or speed quizzes on note names, letters, values, fingerings or stickings.

WRITING & SPEAKING

- A pair of students should research and write program notes for each piece. These students will have to use research skills, read history books, choose interesting and pertinent information, and write cohesive and concise notes about the piece. They could also present these notes verbally to the class or at the concert.

MOVEMENT

- Listen to a piece of music and move your arms or body in a way that reflects the music.
- Create a 16-count dance, and compose a four-measure piece that sounds like the dance looks.
- Compose a percussion trio that musically represents fills, but does not clutter sound-space.

VOCABULARY & ANALOGIES

MATH IN RHYTHM & TIME

Horizontal / X-axis – represents time
Measure – the distance between two things; the amount of something
Ruler – used to measure distances and amounts
Fraction – note names, values/durations
Percent – note names, values/durations
Ratio – relative note values
Add – ties
Multiply – dotted notes (x1.5)
Numerator – top number of a time signature

MATH IN PITCH & HARMONY

Graph – used to plot points or specific pitches
Vertical / Y-axis – represents specific pitches
Distance – vertical distances are intervals
Odd / Even – scale degrees make a tertian Chord; on violin & viola, odd numbered fingers are line notes and even numbered fingers are space notes

PATTERNS & FORM

Pattern – repeated rhythms or pitches
Sequence – pattern starting in a different place
Inversion – pattern turned upside-down
Reverse – backwards patten, or retrograde
Multiply note values creates elongation
Divide note values creates diminution

GEOGRAPHY

Map – visual representation of a complex thing
Symbols – visual representation of individual things
Coordinates – horizontal and vertical markers
Legend – list of symbols to know and understand

HISTORY

Timeline – represents time horizontally
Biography – information about a person
Context – where, when, and why
Purpose – the author or composer's message
Influence – the effect of the work

READING FLUENCY

Following – eyes move left to right / top to bottom
Decoding – know that symbols represent sounds
Fluency – perform symbols accurately in time

LANGUAGE

Root-word – part of a word with meaning across disciplines (ex: uni, duo, tri, and oct)

COMPOSITION vs. LITERATURE

Vocabulary – interpret meaning
Rhythm & Rhyme – small patterns uniting a work
Phrases / Sentences – small section or idea
Punctuation – separates small sections
Form – organizes ideas
Beginning, Middle, End – form of a work
Theme & Variation – form of a work
Development – an in-depth section of a work
Meaning – composer or author's message
Language – lyrics as poetry

SCIENCE OF SOUND

Aerophone – vibrating air (woodwind & brass)
Chordophone – vibrating string
Idiophone – vibrating instrument (cymbals)
Membranophone – vibrating membrane (drums)
Electrophone – electronically created sound
Amplitude – measures volume
Frequency – measures pitch
High / Low Frequency – small / large instruments
Overtone / Partial / Harmonic – frequencies proportional to a fundamental frequency
Timbre – quality of the sound that makes it distinct
Waveform – visual representation of timbre

ART CONCEPTS IN MUSIC

Up / Down – pitch as height; woodwind and piano fingerings mimic melodic height exactly
Line / Contour / Shape – Connecting the dots (note heads) represents the melodic contour
Smooth / Jagged – using intervals of steps / skips
Flowing / Interrupted – non / continuous melody
Foreground / Background – relative importance
Form – organized sections
Colors / Shades – sound described as color
Affect – the mood or emotions the work induces

MOVEMENT IN MUSIC

Time – length of time, and speed of pulse
Movement – sound as horizontal/vertical, forward/backward, smooth/jagged, large/small
Space – music notation represents sounds in space
Energy – volume and forward movement in line
Muscle Memory – repetitive motion becomes automatic
Gross Motor Skills – for marching and percussion
Fine Motor Skills – for piano, winds, strings

ACADEMIC SKILLS

WRITING & SPEAKING TO COMMUNICATE

Signing a Contract – A non-verbal agreement upheld in a court of law.

Write – Write cohesive, concise and mentally stimulating program notes.

Describe – Students use correct vocabulary to describe symbols, concepts, instrument position and techniques.

Speak – Students emceed concerts by introducing ensembles, conductors, and reading program notes aloud.

USING AUTHENTIC VOCABULARY

Vocabulary and concepts come **from the pieces** you are teaching.

Teacher uses the vocabulary in class as an example.

Students use the vocabulary as soon as they have learned it.

Acknowledge root-words that have the same meaning across disciplines: Ex. Uni, Duo, Tri, and Oct.

READING TO UNDERSTAND

Read instructions & definitions aloud to practice fluency, comprehension, and performing.

Read contracts, handbooks & permission slips for important information. Do NOT read it all aloud for them.

Research the composers and pieces, looking for accurate, important, and interesting information.

PERSONAL, GROUP & LEADSHIPS SKILLS

Music ensembles are a specific type of Social Group and Learning Community.

Acknowledge and assess the Personal, Group and Leadership Skills we already teach!

Mastering Personal and Group Skills are important in creating successful individuals and groups.

PERSONAL SKILLS

Personal Organization – arrive on time, with materials, and follow instructions

Personal Motivation – do what is expected, ask questions, apply knowledge

Emotional Well-Being – positive attitude, self-respect, self-confidence, and express ideas appropriately

Goal Setting – know personal strengths and weaknesses, set and achieve appropriate personal goals

GROUP SKILLS

Communication – listen, speak, read, write, and use body language appropriately

Social / Emotional Roles – interact, accept, trust, support, compliment, compromise, respond, use constructive criticism, and resolve conflict

Task Roles – choose, coordinate, cooperate, and complete task

LEADERSHIP SKILLS

Beginning – initiate, model, focus, and problem solve

Advanced – observe/assess, praise/reprimand, set goals, problem-solve, make decisions, create and follow plans and agendas

BENEFITS OF INCLUSION

Success – Music is an opportunity for students to start on a playing field that is level with mainstream students.

Responsibility – Distribute responsibilities so students will lead and succeed!

Respect – Success in performance and leadership roles will increase respect from peers.

New Content & Setting – Music uses symbols, sounds, social and physical skills in new ways.

Reciprocal Knowledge & Motivation – Success in understanding music will increase self-confidence and motivation to learn in all disciplines.

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NOTE NAMES

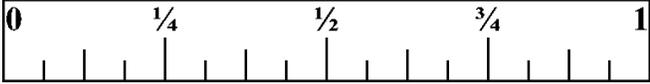
Whole 

Half 

Quarter 

Eighth 

Sixteenth 



NOTE VALUES

NAME	NOTE	REST	Time Signatures			
			4/1	3/2	4/4	12/8
Whole			1	2	4	8
Half			1/2	1	2	4
Quarter			1/4	1/2	1	2
Eighth			1/8	1/4	1/2	1
Sixteenth			1/16	1/8	1/4	1/2

Values/Durations

CONTOURS



Inventio

Johann Sebastian Bach

Allegretto

The image displays a musical score for a piece titled 'Inventio' by Johann Sebastian Bach. The tempo is marked 'Allegretto'. The score is written for piano and consists of four systems of music. The first system begins with a dynamic marking of *mf*. The second system includes a dynamic marking of *p*. The third system includes a dynamic marking of *cresc.*. The score includes various musical notations such as treble and bass clefs, a 3/8 time signature, and numerous fingerings (1-5) and articulations (accents, slurs). The piece concludes with a trill-like figure and the word 'etc.'.

National Music Standards

- 1) **Singing**, alone and with others, a varied repertoire of music.
- 2) **Performing** on instruments, alone and with others, a varied repertoire of music.
- 3) **Improvising** melodies, variations and accompaniments.
- 4) **Composing** and arranging music within specified guidelines.
- 5) **Reading and notating** music.
- 6) **Listen, Analyze & Describe** music.
- 7) **Evaluate** music and music performances.
- 8) Understand **relationships between music and other disciplines**.
- 9) Understand music in **relation to history and culture**.