TEACHING GEOMETRY THROUGH DANCE
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WHY AM I HERE?
OUTCOMES

- Participate in a variety of folk dances that will assist in teaching Geometric concepts
- Explore how to implement Folk Dancing in your classroom
- Brainstorm extensions and adaptations for your unique teaching situation
- Have fun and get those steps in!
TEACHING GEOMETRY THROUGH DANCE

WHY DANCE?

MIDDLE SCHOOL

Y U NO HAVE RECESS
ELEVEN YEAR OLDS

- Restless and very energetic
- Moody, self-absorbed, like to challenge rules, can be cruel to each other
- Very focused on who is “in” and who is “out”
- Would rather learn new skills than review old work
- Attracted to challenge and are academically resilient
TEN YEARS OLD

- Very energetic but need more rest time
- More self-assured and appear at-ease
- Will initiate their own activities without adult prompting
- Both playful and serious. Can enjoy a class game then transition into a serious discussion more easily
- Can better integrate their learning when schools use collaborative, cross-disciplinary teaching models.
- Leadership qualities abound and are better at organizing over and extended period of time.
THIRTEEN YEAR OLDS

- Lots of physical energy but VERY awkward
- Moody and sensitive, often like to be left alone
- Feelings are easily hurt and can be mean to others as a result of insecurity and feeling scared
- Tentative and worried. Unwilling to take risks on intellectual tasks
- Will challenge authority/adults. “Why do we have to learn this?”
FOURTEEN YEAR OLDS

- Very energetic and need lots of movement
- Typically loud and rambunctious
- Are in a “know-it-all” stage
- Respond well to academic variety and challenge
- Learn well in cooperative learning groups
- Take pleasure in developing individual skills and enjoy self-evaluating their work to improve it.
Dance Procedures
Be polite

Will you be my partner?

Yes, thank you.
THE LOOK YOU GIVE YOUR FRIEND

WHEN THE TEACHER SAYS FIND A PARTNER
Always be safe
TEACHING GEOMETRY THROUGH DANCE
Listen
to the music
MY FACE AFTER I JUST FINISH GIVING DIRECTIONS

AND A STUDENT ASKS ME WHAT TO DO.
Thank your Partner
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WHATEVER

memecrunch.com
Clap for the music
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SASHA!
Scattered with Partners
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SASHA!

- A (8)
  All wag finger at partner saying with the music
  “Sahsa, Sasha, ras, dva, tri!”

- B1/2 (16)
  Clap with partner
  Right, right, right (2)
  Left, left, left, (2)
  Both, both, both (2)
  Knees, knees, knees (2)  Repeat!

- C1 (8)
  Right elbow turn; on eight, throw fist in the air and shout “HEY!”

- C2 (8)
  Left elbow turn; on eight, throw fist in the air and shout “HEY!”

- D (32)
  Turn to your partner and say “Das Vidana.” Walk around the room mixing freely until the music
  tells you to find a new partner. Begin the form again!
RIGHT AND LEFT ARM SWING:
REFLECTION AND ROTATION AROUND A VERTEX
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ALABAMA GAL
Long Ways Set

ALABAMA GAL
ALABAMA GAL

- Verse 1
  Head couple **sashays** down and back (16)

- Verse 2
  **Right hand turn** partner (8)
  **Left hand turn** partner (8)

- Verse 3
  **Cast off** (16)

- Verse 4
  Head couple **makes a bridge** and the set passes under
RIGHT AND LEFT HAND TURN:
REFLECTION AND ROTATION AROUND A VERTEX
LONGWAYS SET:
TWO PARALLEL LINES
SASHAY:
TRANSLATION ALONG A FIXED PATH
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CASTOFF AND MAKE A BRIDGE:
A PARABOLA...?
HEEL TOE POLKA
HEEL TOE POLKA

Circle with Partners
HEEL TOE POLKA

A (16)
Partners face each other and join hands.
(“Suns” faces clockwise and “Moons” face counterclockwise)
With the INSIDE foot perform this pattern:
Heel and toe, heel and toe (4)
Sashay three times towards the center and stop (4)
Repeat the pattern with the OUTSIDE foot to return to home

B (16)
Clap hands with Partner
Right, right, right (2)
Left, left, left (2)
Both, both, both (2)
Knees, knees, knees (2)

Turn by the right hand one time around (allemande right) then pass by right shoulders and take the hands of your new partner to begin again
ALLEMANDE RIGHT: REFLECTION AND ROTATION AROUND A VERTEX
FORWARD AND BACK:
COMPRESSION AND DILATION
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SASHAY THE DONUT

THESE DONUTS ARE WINDOW LICKING GOOD
SASHAY THE DONUT

Double Circle Facing Partner
SAHSAY THE DONUT

- **A1 (16)**
  - All *dosido* partner (8)
  - *Right hand turn* partner (8)

- **A2 (16)**
  - *Left hand turn* partner (8)
  - *Two hand turn* partner (8)

- **B1/2 (32)**
  - The designated *first couple* takes hands and *sashays* down the *alley*. The next couple follows creating a *cascade*. The first couple comes *back to home* and quickly releases hands so that the second couple and return home. The rest of the circle follows and the form begins again with the first head couple becoming the last couple.
RIGHT/LEFT/TWO HAND TURN:
REFLECTION AND ROTATION AROUND A VERTEX
DOSIDO: TRANSLATION
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LUCKY SEVEN

JACKPOT

BAR

7

BAR

7

BAR

7
LUCKY SEVEN

Circle with Partners
LUCKY SEVEN

A1 (16)
All circle left (8)
All circle right (8)

A2 (16)
All forward and back (8)
Face partner, take right hands and get ready to Grand Right and Left (8)

B1 (16)
"Suns" Grand right and "Moons" left, passing six people and stopping on the seventh.

B2 (16)
Promenade with your new partner with MOONS on the inside (12)
All join hands and get ready to begin again (4)
CIRCLE RIGHT AND LEFT: GIANT ROTATION
FORWARD AND BACK:
COMPRESSION AND DILATION
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GRAND RIGHT AND LEFT:
SIN AND COSIN WAVES!
SO HOW CAN WE EXTEND IT?
TEACHING GEOMETRY THROUGH DANCE

Knowledge
- Remember previously learned information.

Comprehension
- Demonstrate an understanding of the facts.

Application
- Apply knowledge to actual situations.

Analysis
- Break down objects or ideas into simpler parts and find evidence to support generalizations.

Synthesis
- Compile component ideas into a new whole or propose alternative solutions.

Evaluation
- Make and defend judgments based on internal evidence or external criteria.

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STUDENTS CAN . . .

› Defend their dance move choices in a class discussion
› Compose a dance using Geometry vocabulary
› Analyze a new dance to find Geometry vocabulary
› Demonstrate Geometry Vocabulary using dance moves
› Classify dance moves using Geometry vocabulary
› Describe Geometry vocabulary using dance moves
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RESOURCES

▸ New England Dancing Masters
   http://dancingmasters.com

▸ National Core Arts Standards
   http://www.nationalartsstandards.org

▸ The Google Drive
   https://tinyurl.com/NCTMdanceandgeometry

▸ Folk Dance Posters
   https://www.teacherspayteachers.com/Product/Folk-Dance-Formation-Posters-2491932

▸ My blog
   kodaimusic.wordpress.com

▸ My contact information:
   kodai.musicmaker@gmail.com

▸ Music Playlist: check the google drive, titles and links to the music will be in there!