

Harmonizing Learning: Integrating Music in the Classroom

Karen Scheaffer, James Doyle, Rachelle Johnson
Published by *K20 Center*

This work is licensed under a Creative Commons CC BY-SA 4.0 License

Time Frame 140 minutes

Essential Question(s)

How can teachers use music in the classroom to promote student engagement and emotional regulation?

Summary

This professional development session focuses on insights and strategies for using music in the classroom to promote student engagement. Participants will be asked to examine the importance of music in everyday life, assess their current use of music in lessons, and develop ideas and strategies to use music in the classroom. To conclude the session, participants will reflect on how music can enhance their teaching and engage students.

Learning Goals

- Increase student engagement through realizing the benefits of using music in education.
- Explore practical ways to integrate music across different subjects.
- Develop strategies to enhance student engagement and retention through musical activities.

Standards

InTASC Model Core Teaching Standards (K-12th)

1: The teacher understands how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.
5: The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.
7: The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.
8: The teacher understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.

Attachments

- Cognitive Comics—Harmonizing Learning.docx
- Cognitive Comics—Harmonizing Learning.pdf
- Impacts of Music—Harmonizing Learning.docx
- Impacts of Music—Harmonizing Learning.pdf
- Music Research Article Summaries—Harmonizing Learning.docx
- Music Research Article Summaries—Harmonizing Learning.pdf
- Note Catcher—Harmonizing Learning.docx
- Note Catcher—Harmonizing Learning.pdf
- Presentation Slides—Harmonizing Learning.pptx

Materials

- Presentation Slides (attached)
- Note Catcher handout (attached; one per participant)
- Impacts of Music handout (attached; one per participant)
- Music Research Article Summaries handout (attached; one copy per five participants)
- Cognitive Comics handout (attached; one per participant)
- Large poster papers (one per group)
- Blank paper (one per participant)
- Sticky notes (one per participant)
- Markers (one set per group)

Session Preparation

Printing

Print the attached **Impacts of Music** handout on five different colors of paper in order to divide teachers into groups later in the session.

Survey Setup

Create a copy of the Music Survey to share with your participants. Consider making a QR code or short URL to allow participants easy access to the survey, and add your link and QR code to **slide 2**. Once all participants have responded to the survey, copy the chart from the "Responses" summary tab and add the chart to **slide 7**.

Padlet Setup

1. Go to padlet.com and create a Padlet.
2. Add the question, "How could you use music extracts in your classroom or for other school activities?" to your Padlet.
3. Once you have made all of your selections and set up your Padlet, click the "Open share settings" arrow.
4. Select "Get QR code," and either copy the image of the QR code or click "DOWNLOAD."
5. Add your QR code to **slide 16**.
6. Consider creating a shortened URL link to the Padlet and adding that link to the slide.

10 minutes

Engage

As participants enter the room, give each participant one copy of the **Impacts of Music** handout and one copy of the **Note Catcher** handout.

Use the attached **Presentation Slides** to facilitate this professional learning session. Display **slide 2** and present instructions for the survey and "Mix Tape" section of the Impacts of Music handout. Introduce participants to the idea of a "walk-up" song by telling them that a "walk-up" song is a piece of music that represents them, motivates them, or makes them feel confident.

Facilitator's Note: Poison Rhythm

This phase of the session has participants and the facilitator play the "Poison Rhythm" game. "Poison Rhythm," or "Don't Clap This One Back"," is a musical version of the game "Simon Says." This game helps participants recognize, internalize, and copy rhythms, and has them work as a team to identify the "poison rhythm," or the rhythm they shouldn't repeat back. You may watch an example of the game and practice it yourself using this video from Leicestershire Music.

To facilitate the activity, clap a four-beat rhythm and have participants copy that rhythm by clapping it back in response. Repeat this process by clapping different four-beat rhythms and having participants clap each one back.

Examples of possible four-beat rhythms include:

- ta | ta | ta | ta
- ti- ti | ta | ta | ta
- ta | ti- ti | ta | ta
- ti- ti | ti- ti | ti- ti | ta

The "poison rhythm" is the following:

- **Beat:** 1 | 2 | 3 & | 4
- **Subdivision:** ta | ta | ti- ti | ta
- **Words:** Don't | Clap | This One | Back

Introduce participants to the "poison rhythm" above, also known as "Don't Clap This One Back," "1, 2, 3 &, 4," or "ta, ta, ti-ti, ta." Tell participants that when they hear the facilitator clap this rhythm, they should not clap it back.

Repeat the process by clapping several four-beat rhythms, but add the "poison rhythm" into the series of rhythms. Each time a participant claps the "poison rhythm," the facilitator gets a point. If no participants clap the poison rhythm after the facilitator claps it, the participants get a point.

Clap a four-beat rhythm and wait until you have participants' attention. Continue to do this until participants either stop talking or working and give you their attention, or until they echo the four-beat rhythm you clapped. Once you have their attention, display **slide 3** and explain the purpose of the game "Poison Rhythm," also known as "Don't Clap This One Back." Play a round of "Poison Rhythm" and use the rhythms to get participants' attention. Discuss how participants can use the "Poison Rhythm" game in the classroom or as a callback to get students' attention.

Move to **slide 4** and introduce the session and presenters.

Display **slides 5–6** and review the music survey questions listed below:

- Have you ever…
  - Listened to music on the way to work?
  - Sung the National Anthem?
  - Sung in the shower?
  - Listened to music on Spotify, iTunes, or YouTube?
  - Played a musical instrument?
  - Spoken to a friend about a cool (or terrible) song you heard?
  - Been to a live music concert?
  - Listened to music while exercising?
  - Used music to help you calm down or make you feel better in some way?
  - Become aware of and commented on the music in a film, on TV, or in a public space?

Display **slide 7** and display the results of the Music Survey. Facilitate a discussion about the results.

Show **slide 8** and have participants find an Elbow Partner. Have participants scan the QR code on the slide or navigate to the web address. Have participants type "4" in the blank box then press the dice to determine which question they will answer. Have each participant share their response with their Elbow Partner. Have them repeat this process until each person has answered all the questions, or until time is called.

Use **slides 9–10** to share the essential question and session objectives.

30 minutes

Explore

Display **slide 11** and direct participants' attention to the "Music and Mood" section of their Impacts of Music handouts. Instruct participants to record one word in each section of the table as they hear different examples of music during the following video.

Display **slide 12** and play the video *How Music Affects Film #17: The Lion King*.

Move to **slide 13** and facilitate a discussion about how the use of different music changed participants' feelings while watching the video. Invite participants to respond to the questions on the slide or share out responses from their handouts.

Show **slide 14** and introduce the Stand Up, Sit Down instructional strategy. Pose the questions on the slides to the participants and have them sit down as they share.

Sample Participant Responses

Participants may offer the following responses about music in public spaces:

- Music to make you shop
- Hold music to make you want to hang up
- Music to deter children from hanging around
- Music in a spa to make you relax
- Music in a gym to make you exercise

Optional Discussion About the Mozart Effect

Unhide **slide 15** and facilitate a discussion on the Mozart effect. Explain that the Mozart effect was the result of research that demonstrated that listening to a piece of music by Mozart prior to taking a test improved test results. This research led to the misconception and generalization that listening to Mozart could make you smarter.

Research since then has proven that listening to well-liked music without lyrics can improve short-term memory and therefore help improve performance on a test immediately after studying. However, no long-term impact has been proven.

Distribute one copy of the **Cognitive Comics** handout to each participant. Move to **slide 16** and introduce the Cognitive Comics instructional strategy. Select the Music Extracts link on the cassette tape to open the Harmonizing Learning YouTube playlist.

Play each piece of music on the playlist. Be aware that ads may play between songs. Have participants listen to each excerpt and draw, doodle, or write about the effect the music has on them. Participants will listen to the following pieces on the playlist:

1. *Countdown Timer* from Channel 4's "Countdown"
2. *The Hours* by Philip Glass
3. *Short Ride in a Fast Machine* by John Adams
4. *Three Fingers of Love* by The Art of Noise
5. *Adagio for Strings* by Samuel Barber
6. *Theme from The Pink Panther* by Henry Mancini

Display **slide 17** and have participants navigate to the Padlet on the slide. Have them respond to the questions on the slide using the Collective Brain Dump instructional strategy. Display the Padlet as participants respond. Draw attention to any particular ideas that stand out.

Move to **slide 18** and reflect on the instructional strategies used during the first portion of the session. Have participants fill in their Note Catchers with information about these strategies.

20 minutes

Explain

Transition to **slide 19** and introduce participants to the GramIt instructional strategy. Direct participants' attention to the color of their Impacts of Music handouts. Have them form groups with other participants who have handouts of the same color.

Give each participant one page of the attached **Music Research Article Summaries** handout. Have participants form groups by finding others with the same number of article summary. Give each group one sheet of large poster paper.

Explain that participants should read and discuss their assigned article summaries then choose how to represent their summaries visually. Have each group use their large poster paper to create a representation of their summary. Have them summarize their representation by creating a 1–3 word summary of the abstract in the form of a hashtag (#).

Move to **slide 20** and introduce the Commit and Toss instructional strategy. Have participants listen to the song *Waterloo Sunset* by Def Leppard and think about how they could use music as a tool to start discussions. Have them record their thoughts on a sheet of paper, then crumple the paper and toss it across the room. Participants will then find a different paper and share what that paper's author wrote.

Have participants then find one of the crumpled papers, not their own, and share out what is written on the paper.

Display **slide 21** and discuss how *Waterloo Sunset* could provide multiple starting points for class discussions.

30 minutes

Extend

Transition to **slide 22** and share music-related lessons from different content areas and music-related instructional strategies from LEARN.

- **Math:** The Sound of Polynomials—Using beats to teach fractions.
- **ELA & Social Studies:** Blackbirds in Little Rock—Analyzing lyrics and music to identify literary meaning and historical context.
- **Science:** Make Some Waves; Shaping Soundscapes—Creating songs about scientific processes or concepts.
- **Instructional Strategies:** Chant It, Sing It, Rap It; Blackout Poetry

Show **slide 23** and provide participants with examples of the instructional strategy Chant It, Sing It, Rap It from math and science. Play the videos of *The Quadratic Formula Song* and the *Classification Rap*.

Reorganize participants into groups according to content area. Move to **slide 24** and explain to participants that they should now work together in their subject-area groups to design an activity that incorporates music. Have participants share their final creations or lesson plans with the whole group, and discuss how their activities could be adapted for different grade levels and subjects.

10 minutes

Evaluate

Pass out one sticky note to each participant. Transition to **slide 25** and introduce participants to the How Am I Feeling? What Am I Thinking? instructional strategy. Have participants respond to the questions on the slide using their sticky note as they watch the following video. Display **slide 26** and play the video *Educating Yorkshire: Musharaf*.

Display **slide 27** and have participants reflect on the remaining instructional strategies from the session. Have participants complete their Note Catcher handouts with the final instructional strategies.

Research Rationale

Research demonstrates that people of all ages incorporate music listening into their daily lives to stimulate positive emotions, improve their quality of life, and promote well-being (DeNora, 1999; Williamson, 2014). Listening to music can influence the emotional state of the listener, promoting positive psychological well-being (Saarikallio et al., 2020; Schäfer et al., 2020), and resulting in short-term improvements in cognitive performance (Groarke & Hogan, 2016; Orpella et al., 2025). Consequently, music can be used in everyday life to influence emotions and increase preparedness for a specific activity (De Nora, 1999; Orpella et al., 2025).

Since the COVID-19 pandemic, children's anxiety has increased, with the link between home isolation and future mental health challenges becoming clearer (Loades et al., 2020). Research indicates that during this period of social isolation, while learning at home, music played a vital role for school-age children, helping to enhance feelings of connectedness and support emotional well-being (Cabedo-Mas et al., 2020; Chiu, 2020; Cho & Ilari, 2021; Daubney & Fautley, 2020). Upon students' return to in-person schooling, teachers reported a positive impact on the classroom environment as listening to music promoted calmness and increased student focus and concentration (Zanchi, 2021). Findings from such studies suggest that the careful use of music in the classroom to prepare for and accompany activities could aid students in their academic pursuits and help regulate mood at sensitive times of the day (Liddiard & Rose, 2021; Orpella et al., 2025).

Resources

- Art of Noise. (1984). (Three fingers of) love [Song]. On *Moments in love.* ZTT Records Limited. https://www.youtube.com/watch?v=sj3uN3K7Uy4
- Barber, S. (1971). Adagio for Strings, op. 11 [Musical work recorded by Leonard Bernstein and the New York Philharmonic Orchestra]. YouTube. https://www.youtube.com/watch?v=VLR7s8Rq7Dw. (Original work published 1936)
- BBC. (2014, September 5). *John Adams: Short Ride in a Fast Machine - BBC Proms 2014* [Video]. YouTube. https://www.youtube.com/watch?v=5LoUm_r7It8
- Cabedo-Mas, A., Arriaga-Sanz, C., & Moliner-Miravet, L. (2020). Uses and perceptions of music in times of COVID-19: A Spanish population survey. *Frontiers in Psychology, 11*(606180), 1–13. https://doi.org/10.3389/fpsyg.2020.606180
- Chishti, A. (2016, August 30). *Educating Yorkshire: Musharaf* [Video]. YouTube. https://www.youtube.com/watch?v=XogvI6TP72M
- Chiu, R. (2020). Functions of music making under lockdown: A trans-historical perspective across two pandemics. *Frontiers in Psychology, 11*(616499), 1–11. https://doi.org/10.3389/fpsyg.2020.616499
- Cho, E., & Ilari, B. S. (2021). Mothers as home DJs: Recorded music and young children's well-being during the COVID-19 pandemic. *Frontiers in Psychology*, *12*(637569), 1–12. https://doi.org/10.3389/fpsyg.2021.637569
- Culhane, T. H. (2007, July 28). *Classification rap* [Video]. YouTube. https://www.youtube.com/watch?v=6jAGOibTMuU&t=9s
- Daubney, A., & Fautley, M. (2020). Editorial research: Music education in a time of pandemic. *British Journal of Music Education, 37*(2), 107–114. https://doi.org/10.1017/S0265051720000133
- Deff Leppard. (2018, December 12). *Waterloo sunset* [Video]. YouTube. https://www.youtube.com/watch?v=yhqDD1je8PQ
- DeNora, T. (1999). Music as a technology of the self. *Poetics, 27*(1), 31–56. https://doi.org/10.1016/S0304-422X(99)00017-0
- Glass, P. (2002). The hours [Musical work]. On *The Hours: Music from the Motion Picture.* Nonesuch Records. https://www.youtube.com/watch?v=yYuTEcArOr8
- Groarke, J. M., & Hogan, M. J. (2016). Enhancing wellbeing: An emerging model of the adaptive functions of music listening. *Psychology of Music*, *44*(4), 769–791. https://doi.org/10.1177/0305735615591844
- K20 Center. (n.d.). Blackbirds in Little Rock: Exploring the history behind the music. 5E Lessons. https://learn.k20center.ou.edu/lesson/3699
- K20 Center. (n.d.). Blackout poetry. Strategies. https://learn.k20center.ou.edu/strategy/84
- K20 Center. (n.d.). Chant it, sing it, rap it. Strategies. https://learn.k20center.ou.edu/strategy/143
- K20 Center. (n.d.). Cognitive comics. Strategies. https://learn.k20center.ou.edu/strategy/198
- K20 Center. (n.d.). Collective brain dump. Strategies. https://learn.k20center.ou.edu/strategy/111
- K20 Center. (n.d.). Commit and toss. Strategies. https://learn.k20center.ou.edu/strategy/119
- K20 Center. (n.d.). Elbow partners. Strategies. https://learn.k20center.ou.edu/strategy/116
- K20 Center. (n.d.). GramIt. Strategies.https://learn.k20center.ou.edu/strategy/2554
- K20 Center. (n.d.). How am I feeling? What am I thinking?. Strategies. https://learn.k20center.ou.edu/strategy/187
- K20 Center. (n.d.). Make some waves. 5E Lessons. https://learn.k20center.ou.edu/lesson/2407
- K20 Center. (n.d.). Padlet. Tech Tools. https://learn.k20center.ou.edu/tech-tool/1077
- K20 Center. (n.d.). Shaping soundscapes: ADSR in ensemble performances. 5E Lessons. https://learn.k20center.ou.edu/lesson/3575
- K20 Center. (n.d.). Stand up, sit down. Strategies. https://learn.k20center.ou.edu/strategy/1771
- K20 Center. (n.d.). The sound of polynomials. 5E Lessons. https://learn.k20center.ou.edu/lesson/3228
- Lausten, S. [Loud Son]. *How music affects film #17: The Lion King* [Video]. YouTube. https://www.youtube.com/watch?v=ecYgqLml89c
- Leicestershire Music. (2019, October 3). *Guitar - Don't clap this one back - with LSMS* [Video]. YouTube. https://www.youtube.com/watch?v=I4KN94wUxtA
- Lev. (2016, November 30). *Cassette tape* [Illustration]. The Noun Project. https://thenounproject.com/icon/tape-cassette-746747/

- Liddiard, E., & Rose, D. (2021). A pilot study of an intervention for children using music listening and music making to explore core emotions and support wellbeing. *Open Journal of Social Sciences, 9*(3), 329–364. https://doi.org/10.4236/jss.2021.93022
- Loades, M. E., Chatburn, E., Higson-Sweeney, N., Reynolds, S., Shafran, R., Brigden, A., Linney, C., McManus, M. N., Borwick, C., & Crawley, E. (2020). Rapid systematic review: The impact of social isolation and loneliness on the mental health of children and adolescents in the context of COVID-19. *Journal of the American Academy of Child & Adolescent Psychiatry, 59*(11), 1218–1239. https://doi.org/10.1016/j.jaac.2020.05.009
- Mancini, H. (1975). The pink panther theme [Song]. On *The Return of the Pink Panther.* RCA Records. https://www.youtube.com/watch?v=VyZiluMufTA
- Microsoft. (2025). *Copilot* (May 13 version) [Large language model]. https://copilot.microsoft.com/
- mongrelvids. (2010, October 24). *The countdown clock* [Video]. YouTube. https://www.youtube.com/watch?v=M2dhD9zR6hk
- Orpella, J., Bowling, D. L., Tomaino, C., & Ripollés, P. (2025). Effects of music advertised to support focus on mood and processing speed. *PloS One*, *20*(2), e0316047. https://doi.org/10.1371/journal.pone.0316047
- Saarikallio, S. V., Randall, W. M., & Baltazar, M. (2020). Music listening for supporting adolescents' sense of agency in daily life. *Frontiers in Psychology*, *10*(2911), 1–11. https://doi.org/10.3389/fpsyg.2019.02911
- Schäfer, K., Saarikallio, S., & Eerola, T. (2020). Music may reduce loneliness and act as social surrogate for a friend: Evidence from an experimental listening study. *Music & Science, 3*. https://doi.org/10.1177/2059204320935709
- Ralph_PH. (December 6, 2018). [Photograph of Def Leppard drummer Rick Allen]. Wikimedia Commons. https://commons.wikimedia.org/wiki/File:DefLappardO2061218-51_(49913641228).jpg
- Rambow, O. (2015, October 2). *The quadratic formula song – with harmony* [Video]. YouTube. https://www.youtube.com/watch?v=VOXYMRcWbF8
- Williamson, V. (2014). *You are the music.* Icon Books Ltd.
- Zanchi, B. (2021). CM 25: Music therapy approaches to listening in the classroom for children and young people. In N. Clough & J. Tarr (Eds.), *Addressing issues of mental health in schools through the arts: Teachers and music therapists working together* (pp. 317–319). Routledge.