



Smithsonian Folkways

Music Within the River: Exploring Baka Water Drumming A Smithsonian Folkways Lesson

Designed by Kaitlin Beck
University of St. Thomas

During my summer graduate coursework, I took a Smithsonian Folkways World Music Pedagogy course that was inspiring, challenging, and a huge learning experience. I submitted the lesson below for my final project; this writing process included extensive research, which is an integral part of presenting this lesson in a respectful way. Don't hesitate to reach out if you have questions 😊



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Summary: This collection of lessons provides an opportunity to experience the water drumming (liquindi) and singing traditions of the Baka people through simple and polyrhythmic musical examples. Students will actively listen, discuss, and explore how water can be played like a drum.

Suggested Grade Levels: K-2, 3-5

Countries: Cameroon, Republic of Congo, Gabon, Central African Republic

Region: East (Cameroon), Sangha (Congo), Woleu-Ntem (Gabon), Sangha-Mbaéré (Central African Republic)

Culture Group: Baka or Bayaka

Genre: Water drumming (liquindi)

Instruments: Voice, body percussion, water, found sounds in nature

Language: Baka

Co-Curricular Area: Science, Social Studies

National Music Standards: 1, 2, 3, 4, 6, 7, 8, 9, 10

Social Justice in Music Education Standards: 1, 5, 6, 8, 9, 10, 12, 16, 19

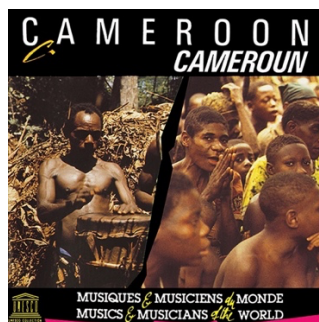
Prerequisites:

Experiences with saying and or playing short rhythm patterns or layered ostinati using body percussion or unpitched percussion; exposure to polyrhythmic musical material

Objectives

- Students will perform steady beat, rhythmic ostinato, sing the melody to a recording of The “Water Drum” (National Standards 3, 4, 7; Social Justice Standards 1, 6, 8)
- Students will create an ostinato, counter melody, or harmony to play with a recording of The “Water Drum” (National Standards 1, 2, 3, 4; Social Justice Standards 1, 6, 8)
- Students will teach a partner how to play, sing, or move an original ostinato with a recording of The “Water Drum” (National Standards 1, 2, 3, 4, 7, 10; Social Justice Standards 1, 6, 8)
- Students will draw connections and differences between Baka and Vanuatuan style water drumming (National Standards 1, 2, 3, 4, 7, 10; Social Justice Standards 1, 6, 8, 9, 10)
- Students will explore known water drumming techniques and invent their own hybrid styles of playing (National Standards 1, 2, 3, 4, 7, 10; Social Justice Standards 1, 6, 8, 9, 10)
- Students will create their own water drumming ensembles in the style of Baka and Vanuatuan water drumming music (National Standards 1, 2, 3, 4, 6, 7, 8, 9, 10; Social Justice Standards 1, 5, 6, 9)

Materials: Audio visual technology to play sound and video, vessels of varying sizes, shapes, and depths filled with water (pools, buckets, bowls, sinks, etc.), rain ponchos or pool clothing, goggles



[“The ‘Water Drum’”](#), Cameroon: Baka Pygmy Music, Recorded by Simha Arom and Phillipe Renaud, UNES08029, c. 1977, UNESCO Collection of Traditional Music

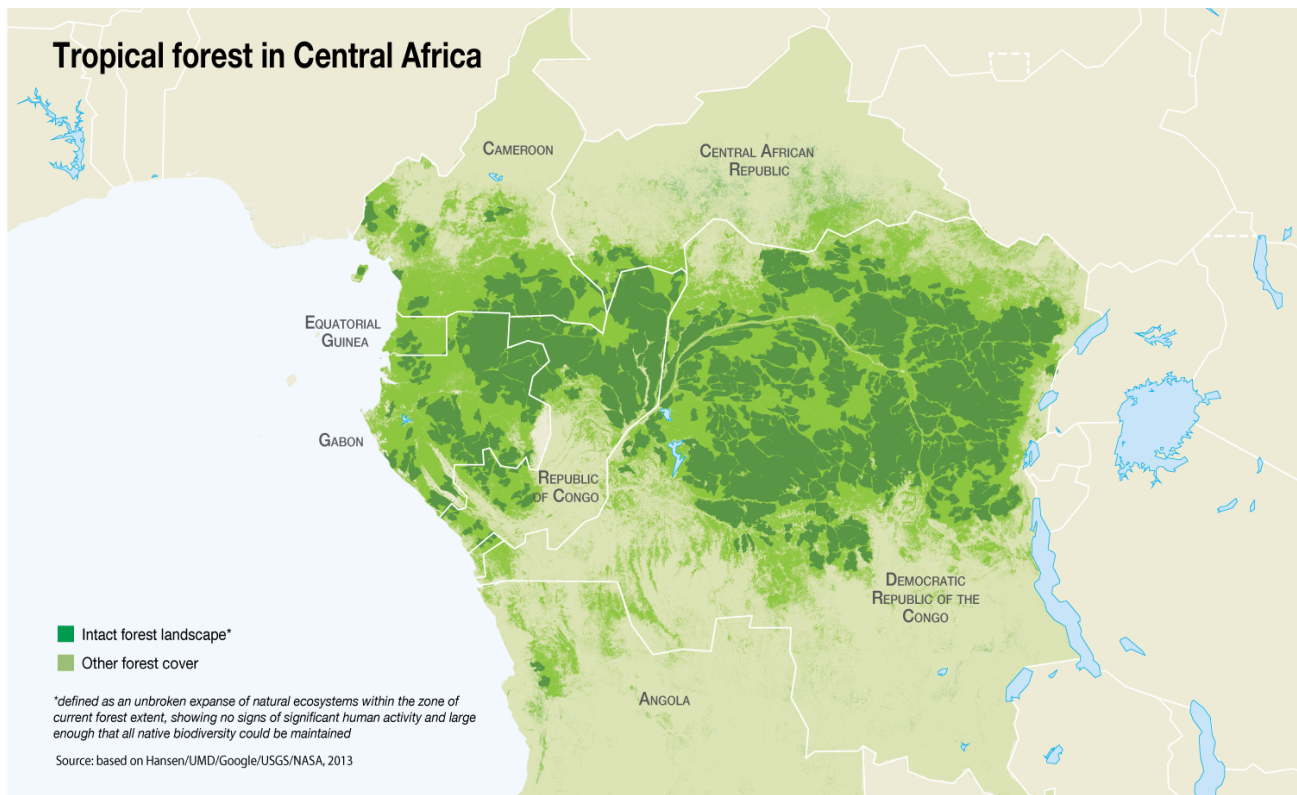
[Baka Traditional Music – Another Liquindi \(Water Drumming\)](#), Baka Beyond video

[Vanuatu Women's Water Music-Sogor \(Rim Rim Siag\)](#), Tim Cole video

[Water Music of Vanuatu](#), APS Physics video



map of the Baka from The University of British Columbia [wiki](#)



map of the Congo River Basin rainforests from [GRID-Arendal](#)



map of the Congo River Basin from [Wikipedia](#)



Congo River Basin rainforests from [AGU](#)



Congo River Basin rainforests from [Profor](#)



Baka children from [BBC](#)



map of Vanuatu from [Mapsland](#)



dancing at Leweton Cultural Village from [Leweton Cultural Experience](#)



singing at Leweton Cultural Village from [Leweton Cultural Experience](#)

Lesson Segments:

1. The "Water Drum"

- a. National Standards 1, 2, 3, 4, 7
- b. Social Justice Standards 1, 6, 8

2. Baka Life and Music

- a. National Standards 1, 2, 3, 4, 7, 10
- b. Social Justice Standards 1, 5, 6, 8, 10, 12, 16, 19

3. World Connections: Vanuatu Water Drumming

- a. National Standards 1, 2, 3, 4, 7, 10
- b. Social Justice Standards 1, 6, 8, 9, 10

4. Creating a Water Drumming Ensemble

- a. National Standards 1, 2, 3, 4, 6, 7, 8, 9, 10
- b. Social Justice Standards 1, 5, 6, 9

1. The "Water Drum"

a. Listening – [The "Water Drum"](#)

- i. Setting the stage with breathing
 - 1. Inhale for 4, hold for 4, exhale for 4, hold for 4; repeat
- ii. Attentive
 - 1. Where might this music be from? Cameroon, Central African Republic, Congo, and Gabon
 - a. Discuss using both maps, effect of colonialism on country borders not matching Baka location¹
 - 2. In what setting do you think this music is occurring?
The river
 - 3. What do you hear?
 - a. Singing? Speaking? Both, adults and children
 - b. Instruments? Water drum
 - c. Form, texture? Multiple percussion parts, layering in of parts, singing

¹ Colonialism and Fugitive Communities in West Africa, 1920-1955: Seeking Parallels with Maroon Societies by Alexander Keese in *Africa-Europe Group for Interdisciplinary Studies*, vol. 15 (2015), pg. 143-163.

d. Language? Baka

iii. Engaged

1. Play the steady beat with the recording
2. Play one of the water drum rhythm patterns with the recording using body percussion
3. Repeat step 2 twice, playing another part
4. Sing the melody on a neutral syllable or move/trace the melodic outline

iv. Enactive

1. Create and perform a rhythm pattern, counter melody, harmony, or other part that compliments the ensemble, play it with the recording

Extension: Students share and teach the rhythm, counter melody, harmony, or other complementary part from the enactive listening portion of this lesson to another student, then perform with the recording on a new part

Assessment: Students can maintain the steady beat and identify and play rhythm patterns on body percussion with a polyrhythmic musical example

2. Baka Life and Music

- a. Show pictures of the Congo River Basin rainforest where the Baka reside, including pictures of the rivers (found in materials above)
 - i. Setting the stage with breathing
 1. Inhale for 4, hold for 4, exhale for 4, hold for 4; repeat
 - ii. Listening and watching – [Baka Traditional Music – Another Liquindi \(Water Drumming\)](#)
 1. Attentive
 - a. Students listen to the audio only, no video
 - i. Where might this music be from? Cameroon, the Baka people
 - ii. Does this remind you of other music you have heard before? Audio from past class; student personal experiences
 - iii. What instruments or sounds do you hear? Drums; low, middle, and high sounds; water
 - iv. What are the differences between this recording and the one we listened to last class? No singing or speaking; different piece of music
 2. Engaged
 - a. Students listen and watch, audio and video
 - i. What surprised you when we added the video into this listening experience?
 - b. Play the steady beat with the recording
 - c. Play one of the water drum rhythm patterns with the recording using body percussion
 - d. Repeat previous step twice, playing another part
 - b. Discuss lifestyle of Baka – hunter gatherers, nomads^{2,3}

² Rupp, S. K. (2011). *Forests of belonging: Identities, ethnicities, and stereotypes in the Congo River Basin*. University of Washington Press.

³ Köhler, A.M. (1998). *Forest, hearth and home: Baka village life in northwestern Congo*. (Publication no. 10757361). [Doctoral dissertation, University of Manchester]. ProQuest Dissertations and Theses Global.

- i. Persecution based on height⁴
 - ii. Historically have been enslaved by the Bantu⁵
- c. Share information about the worship of Komba⁶, deforestation and removal of Baka in Cameroon^{7,8,9,10}, relationships with Konabembe farmers and government¹¹
- d. Share information on connections between music and ritual^{12,13}
- e. Water drumming exploration
 - i. Pass out water containers (pools, buckets, bowls, sinks, etc.) to students, allow them to figure out how many different sounds they can create with the water, 2-3 minutes—could be done in small groups if there are not enough containers for each student to have their own
 - 1. What types of sounds were you able to create?
 - a. High, low, middle, bright, dark, etc.
 - 2. What was your favorite sound you discovered?
 - a. Students can demonstrate or describe
 - 3. How does the sound of water drumming compare to the other drum experiences we have had in class?

⁴ Rupp, S. K. (2011). *Forests of belonging: Identities, ethnicities, and stereotypes in the Congo River Basin*. University of Washington Press.

⁵ Schulman, S. (2016, May 4). *Life for the Baka pygmies of Central African Republic*. The Guardian.

<https://www.theguardian.com/global-development/2016/may/04/life-for-the-baka-pygmies-of-central-african-republic>

⁶ Leonard, Y. (1997). *The Baka: A people between two worlds* (Publication no. unknown). [Master's thesis, Providence Theological Seminary]. National Library of Canada.

⁷ Lueong, G.M. (2016). *The forest people without a forest: Development paradoxes, belonging and participation of the Baka in east Cameroon*. Berghahn Books, Incorporated.

⁸ Annagu, F. (2021, June 2). *Cameroon: large-scale logging forces indigenous Baka out of the forests*. Pulitzer Center.

<https://rainforestjournalismfund.org/stories/cameroon-large-scale-logging-forces-indigenous-baka-out-forests>

⁹ Bertrand, N. (2021, February 17). *The sedentarization of the Baka people in Cameroon (French)*. Pulitzer Center.

<https://pulitzercenter.org/stories/sedentarization-baka-people-cameroon-french>

¹⁰ Unknown. (2021, June 15). *Baka communities face eviction in the Congo Basin*. ArcGIS.

<https://storymaps.arcgis.com/stories/c2b0263d00644ce499c5e7c254d6c3b2>

¹¹ Hattori, S. (2014). Current issues facing the forest people in southeastern Cameroon: The dynamics of Baka life and their ethnic relationship with farmers. *African Study Monographs* 47, 97-119. <https://doi.org/10.14989/185099>

¹² Weig, D. (2017). Resonating with different worlds: How Baka music practices generate sociality, identities and connection to ritual spirits. In Josep Marti & Sara Reville Gutiez (Eds.), *Making music, making society* (pp. 191-213).

¹³ Bundo, D. (2001). Social relationship embodied in singing and dancing performances among the Baka. *African Study Monographs* 26, 85-101.

- a. Tactile in a different way; water based; it has the same sounds as the drums we use
- ii. Introduce a video on sound frequency and playing techniques used in water drumming – [Water Music of Vanuatu](#)
 1. What were the 3 techniques shown in the video? Slap, plunge, plow¹⁴
 2. How else could you play the water to create a different sound?
- iii. Give students another 2-3 minutes to create a rhythm pattern they can repeat as an ostinato
 1. Encourage students to keep patterns short and simple enough to repeat or teach to another person
 2. Encourage students to try out the 3 techniques from the video or develop hybrids
- iv. Share with a partner the pattern you created
 1. If time, teach them to play it
- v. Share with the group a pattern you created
 1. Vote on a few to learn as a whole class, play through
 2. While students play the ostinato, teacher can improvise on top or add another ostinato

Extension: Experiment with splitting the class in half and having each group play a different complementary ostinato from student generated creations

Assessment: Students can transfer previous experiences with steady beat and rhythmic patterns using body percussion to playing the water like an instrument

¹⁴ Mann, S., Janzen, R., Huang, J., Kelly, M., Ba, L.J., & Chen, A. (2011, January 22). *User-interfaces based on the water-hammer effect: Water-hammer piano as an interactive percussion surface*. [Presentation]. International Conference on Tangible, Embedded, and Embodied Interaction, New York, NY. <https://dl.acm.org/doi/10.1145/1935701.1935703>

3. World Connections: Vanuatu Water Drumming

- a. Partner or whole class reflection
 - i. What have we learned over the past few classes?
 - ii. How does this fit into the larger context of drumming that we have experienced previously?
 - iii. What other items that we do not think of as 'instruments' could be used to create music?
- b. Setting the stage with breathing
 - i. Inhale for 4, hold for 4, exhale for 4, hold for 4; repeat
- c. Listening and watching – [Vanuatu Women's Water Music-Sogor \(Rim Rim Siag\)](#)
 - i. Attentive
 1. Students listen to the audio only, no video
 - a. Where might this music be from? Vanuatu people
 - i. Discuss using map
 - b. Have you heard this music before? Video and audio from past classes; student personal experiences
 - c. What instruments or sounds do you hear? Low, middle, and high sounds; water drumming; singing; everyone is playing in unison; not polyrhythmic
 - d. What are the differences between this recording and the one we listened to last class? No singing or speaking; different piece of music; women are moving/dancing while playing
- d. Introduce information about the Vanuatu and water drumming¹⁵
 - i. Part of Melanesia, which includes Papua New Guinea, West Papua, Solomon Islands, Vanuatu, and New Caledonia¹⁶

¹⁵ Hayward, P. (2014). Sounding the aquapelago: The cultural-environmental context of ni-Vanuatu women's liquid percussion performance. *Perfect Beat* 5(2), 113-127.

¹⁶ Ammann, R. (2012). *Sounds of secrets: Field notes on ritual music and musical instruments on the islands of Vanuatu*. LIT Verlag Münster.

- ii. Collection of islands east of Australia, including the Torres, Banks, Small, South Pentecost, and Shepherd islands¹⁷
 - 1. Colonized by Spain, France, and Great Britain
- iii. Music exchanged throughout the island diaspora, becoming hybridized, intermixing^{18,19}
 - 1. Leweton Cultural Village (pictures above)²⁰
- iv. Water drumming as cultural sustainability, inherent connection to nature²¹
 - 1. "The water music in this song is based on the Vus Ero rhythm, with a traditional song, Rim Rim Siag' from the Merelaya and Gaua islands sung in the Mwerlap language, it is sung to invoke strength, either the physical strength to move a rock or for the emotional and spiritual strength needed to face exceptional challenges. This song gives you the power to do things you couldn't normally do."²²
 - 2. Naming the sounds of splashing water; 5 'songs'²³
 - a. Vus tuwel – 'the first beat'
 - b. Kor nē-bē – the sound of water falling over stones
 - c. Ne-kea 'dolphin' – sound of dolphins flapping their fins on the water
 - d. Nē-rē 'rain' – sound of rainwater falling on leaves and thatched roof
 - e. Vus ero – sound of people chasing and shepherding fish into traps and nets

¹⁷ Jolly, M. (2012). *Women of the place: Kastom, colonialism, and gender in Vanuatu*. (2nd ed.). Routledge Press.
file:///Users/KaitlinBeck/Downloads/10.4324_9781315077147_previewpdf.pdf

¹⁸ Stern, M. (2013). Music in traditional exchanges in north Vanuatu. *Pacific Studies* 36(1/2), 59-76.

¹⁹ Dick, T. (2014). Vanuatu water music and the Mwerlap diaspora: Music, migration, tradition, and tourism. *Alternative* 10(4), 392-407.

²⁰ Leweton Cultural Village. (Unknown). About. Leweton cultural experience. <https://leweton.weebly.com/about.html>

²¹ Grant, C. (2019). Climate justice and cultural sustainability: The case of Etētung (Vanuatu Women's Water Music). *The Asia Pacific Journal of Anthropology* 20(1): 42-56. <https://doi.org/10.1080/14442213.2018.1529194>

²² Small Island Big Song. (Unknown date). Sogor (Small Island Mix) – Small Island Big Song Ft' The Leweton Cultural Experience. Ethnocloud. https://ethnocloud.com/Small_Island_Big_Song/?song=10391&b=4672

²³ Cole, T. (2014). [Liner notes]. In *Vanuatu Women's Water Music* [DVD]. Vanuatu, Further Arts and Wantok Music.

e. Listening and watching – [Vanuatu Women's Water Music-Sogor \(Rim Rim Siag\)](#)

i. Attentive

1. How were the women playing the water with their hands in this video and the one from last class? Hard, soft; fast, slow; flat, cupped hand; pulling water
2. What pattern are they playing? Plow, plow, plow, plow, slap, slap (or clap, clap) – vus ero rhythm

ii. Engaged

1. Play the pattern using body percussion with the video
2. Pass out water containers, students practice playing the vus ero rhythm for 2-3 minutes
3. Play the vus ero rhythm with the video

Extension: Students research the other 4 songs (vus tuwel, kor nē-bē, ne-kea 'dolphin', and nē-rē 'rain') in small groups and share out what they were able to find with the class. Analyze each of the songs and experiment with playing them using recordings or acapella

Assessment: Students can identify and describe aural differences between two pieces of music and can transfer previous experiences with water drumming to play a simple ostinato with a recording

4. Creating a Water Drumming Ensemble

- a. Setting the stage with breathing
 - i. Inhale for 4, hold for 4, exhale for 4, hold for 4; repeat
- b. Partner or whole class reflection
 - i. What have we learned over this process?
 - ii. What questions do we still have? What are we curious about?
 - iii. How has this process challenged or strengthened your musicianship? What was easy? Difficult?
 - iv. What did you learn that can be applied to other parts of music class? School? Community? Life?
- c. Split students into groups and pass out the water containers
 - i. Brainstorm and practice what types of sounds can be created
 - ii. Experiment with different patterns, once students have something they like, share with other group members
 - iii. Each member teaches their favorite pattern to the group
 - iv. Experiment with layering, arranging, and modifying the different patterns to create a water drumming ensemble
 1. Should contain at least 2 complementary parts
 2. May include movement or dance
 - v. Teacher roams around, providing assistance and feedback
- d. Present water drumming ensembles to the whole class
 - i. Reflect and share thoughts using "I noticed..., I wondered..., I valued..."

Extension: As a class, collaboratively create, arrange, and play a water drumming composition

Assessment: Students can play and maintain their own rhythmic water drumming idea in an ensemble setting of layered ostinati