Activity Plan

Title

Systems of the Body: Movement and Choreography

Subject

Dance: Responding

Author

ArtsEdge:
Jen Westmoreland Bouchard
Adaptation

Grade level

Grades 6-8

Time duration

60-120 mins

Overview

In this lesson, students will create movement patterns that express information about the basic systems, organs, and processes of the human body. They will work in pairs and in groups to make movement choices that communicate scientific concepts in creative movement, and make inquiries, through research and movement experimentation, into the ways in which the body's systems work and how those systems interact.

Objective

Students will:

- Discover and create movement patterns that express information about the basic systems, organs, and processes of the human body.
- Make inquiries, through research and movement experimentation, into the ways in which the body's systems work and how those systems interact.
- Work alone, in pairs, and/or in small groups to make movement choices that communicate scientific concepts in creative movement.

Materials

Materials

Resources

- **Website**
- **Interactive Body - BBC**

Required Technology

- **1 Computer per Classroom**
- **Projector**
- **Video Camera**

Activities and procedures

ENGAGE

1. Have students explore the BBC's "Interactive Body," a series of expeditions into the body. Students can learn about the systems of the body as they explore each game-like interactive. As students are exploring, you may wish to have them choose one system in the body to which they should pay particular attention.

BUILD KNOWLEDGE

1. Assign five small groups to each work on one system of the body using the BBC's "Interactive Body" for research. Students should take notes as they research. Provide written resources for background information on:

- **Five of the major systems of the body - Circulatory, Respiratory, Nervous, Muscular-Skeletal, and Digestive**
- **Organs and components of each system**
- **Basic terminology of each system (esophagus, peristalsis, alveoli, capillary, valve, synapse, digestion, neuron, etc.)**

2. Discuss parts of the systems, such as blood vessels, lungs, muscle fibers, nerve cells, and stomach. Link systems with elements of dance—for example, breathing and energy or time (rhythm), circulation and space (pathways).

3. Have students create movements that represent the following words taken from the body's systems in action, such as: beat, inhale, push, connect, float, churn, etc. Have students move through the general space, using the given words as the movement stimulus. Have them freeze between movements, and call attention to the interesting or unusual or evocative shapes they form as they remain frozen.

4. Demonstrate or model an action from the body that was discovered (such as the heartbeat) during their tour of BBC's "Interactive Body" without telling the students what the action is. Have students guess, then discuss the answers.

APPLY

1. Have students perform mirror actions in pairs. Divide students into pairs. Have partners face one another, with one as leader and one as follower. Give them one action word at a time. The leader does the action while the follower attempts to move like the leader's mirror image. Alternate who leads as you go through the word list (including words such as: beat, inhale, push, connect, float, digest, flow, churn, etc.) Allow time for partners to discuss afterwards.

2. Have students perform complementary actions in pairs. While partners are still facing each other, repeat the word list (or use new words suggested by the group). This time the leader moves freely as the responder attempts to move in complementary fashion. Example: the leader "chews" at a high level, and the responder does a similar

action at low level. Discuss the activity after each partner has had a chance to lead and respond.

3. Explain to students that they will, within their groups, choreograph a simple dance that expresses information about how an organ or a major system functions. The guidelines for the choreography are:

- Each performance must have a beginning, a middle, and an end; the beginning gets our attention, the middle is the movement content, and the end lets us know you are finished.
- Only the body can be used; neither props nor vocal sound effects can be used.

4. Give students some ground rules for working on choreography within their groups:

- Everyone in the group must have a job. This means that everyone must take part in all phases of the work, from choreography to rehearsal to performance.
- Use your time wisely. Don't waste time on things that don't help you create your assigned work.
- Safety first! The floor is hard; you are not. And don't scare your audience (that is, you may startle them, but don't make the audience fear for your safety!).

5. Circulate around the room and offer feedback or suggestions when needed. (Note: Resist the temptation to choreograph for the groups; each piece must be wholly the students' work.) Some examples of constructive feedback are: Can you choose just a part of the system to demonstrate? How will you express through movement only a part, instead of the whole system? Which systems, organs, or parts have the most movement possibilities? The most interesting shapes?

Conclusions

REFLECT

1. Have each group share their initial results, the "first drafts," with the class. Videotape if possible. Guide a discussion of each group's presentation, asking students to be sure to keep all comments positive and constructive.

2. During the next class period or two, allow students time to re-work their choreography. Have students keep a detailed record of their process and the changes they make to their choreography and final piece. You may wish to videotape each draft or iteration for a comparative record of the process.

Adaptations

Accessibility Notes

Students with visual impairments or disabilities may need modified handouts or texts. Students with physical disabilities will need modified movement options

Links and Websites

Lesson Setup

Teacher Background

Teachers should familiarize themselves with the vocabulary that will be used to describe body systems using these materials.

- **BBC Science and Nature: Human Body and Mind**
- **Exploratorium Science Links**
- **Yucky.com's Gross and Cool Body**