

WHAT'S THE MATTER? BAIP OVERLAY

An Overview of How to Apply Brain-Targeted Teaching® and Arts Integration to the Baltimore City SABES Classroom

SABES Content: Grade 2, Unit 2

Artform Focus: Movement, Song, & Theater

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Welcome Message



Dear educator,

Welcome to the Baltimore Arts Integration Project! We are excited to share resources and activities that help you bring the arts and brain-based pedagogy directly to your classroom with content that integrates seamlessly with your existing curriculum.

Studies show again and again how the arts are an ideal method for teaching for mastery because of their direct association with supporting long-term memory of content knowledge and skills. What is more, they bring more joy, connection, and a greater sense of belonging to learning experiences.

The Brain-Targeted Teaching® model (BTT) is an instructional model that guides educators in applying brain research for highly effective instruction. Arts integration is an approach to teaching in which students learn through the creative process of art making. Both concepts are the driving force behind the content below.

Happy teaching!

Sincerely, The BAIP Team

Brain Target 1: The Emotional Climate

BTT prioritizes building positive and affirming learning environments. This allows the brain and body to be more receptive to the learning activities.

To set up the emotional climate for learning and approaching these arts-integrated experiences, we suggest:

Start-of-Day Temperature Check:

- Begin each day with a brief check-in to gauge students' emotional states. You can use a simple scale on a poster or a slide (e.g., emoticons or a numbered scale) that students can reference.
 - This act of identification supports the development of emotional literacy.
- Encourage open communication about their emotions, fostering a supportive atmosphere.

Classroom Agenda at the Top of Class:

- Clearly display the agenda at the beginning of each class session.
- Outline the day's activities, including any theatre improvisation and music components.
- Provide a brief overview of the learning objectives to create anticipation and focus.
- Include images, colors, and words that evoke creativity, curiosity, and collaboration.

Encourage Having Fun:

- Positive Atmosphere: Emphasize the importance of having fun while learning.
- Encouragement: Remind students that there are no right or wrong answers in artistic expression, fostering a non-judgmental environment.

Brain Target 2: The Physical Environment

A conducive learning environment is prepared through deliberate planning that incorporates novelty, order, and aesthetic elements in each unit. The balance between consistency and novelty is crucial: novelty stimulates creativity, while a familiar foundation provides stability.

For this overlay, we suggest the following for setting up your optimal physical environment:

Props for Role-Play:

- Selection: Provide a variety of hand-held props that are relevant to the lessons and encourage creativity in role-play.
- Accessibility: Ensure props are easily accessible to students, allowing them to choose items that enhance their engagement in the activities.
- Versatility: Select props that can be used in multiple ways, fostering imaginative and versatile use during theatre improvisation.

Music & Lyrics Integration:

- Preparation: Have the music and lyrics for the selected lesson ready in advance.
- Clear Display: Display lyrics visually to facilitate singing and musical engagement.
- Cue Points: Plan specific moments for music integration, enhancing the overall experience and connection to the content.
- Familiarity: Familiar music helps create a comfortable atmosphere, making it easier for students to participate in the arts-integrated experiences.

Dramatic Play Acting Space:

- Defined Area: Designate a specific area in the classroom for dramatic play and role-play activities.
- Flexibility: Ensure the acting space is adaptable to different scenes and scenarios, promoting a seamless transition between activities.
- Comfort: Arrange the space to accommodate movement and interaction, allowing students to feel comfortable and immersed in the dramatic play experience.

Physical Signs for States of Matter Activity:

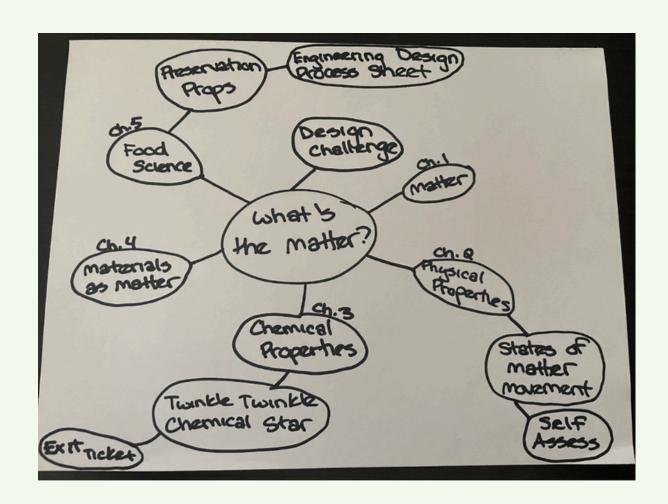
- Visual Cues: Provide liquid, solid, and gas signs for students to hold or wear during the activity.
- Clear Identification: Enhance understanding by visually representing the states of matter, allowing students to physically associate themselves with the concepts.
- Interactive Learning: Encourage movement and exploration within the defined states, making the abstract concepts of matter more tangible through this interactive and visual approach.

Printed Materials of Songs and Activities

- Visual Resources: Provide printed materials with clear visuals and lesson overlays for both songs and theatre improvisation activities.
- Accessibility: Distribute these materials in advance, allowing students to familiarize themselves with the content, promoting confidence during the activities.

Brain Target 3: Big Picture Learning Design

Concept mapping is a pictorial method of big picture planning. By using a thematic graphic organizer, we show how Brain Targets 4, 5, and 6 work together with arts integrative activities to achieve this SABES unit's learning goals and objectives.



Brain Target 4: Mastery of Content, Skills, and Concepts

Brain Target 4 speaks to the educator's aim to facilitate knowledge acquisition where information transitions from short-term to long-term memory. Brain research highlights how neural networks for memory grow stronger with use. Therefore, the teacher's goal is to "hardwire" vital content by utilizing diverse learning experiences that allow for "repeated rehearsal" of core skills and knowledge areas. Arts integration is an ideal approach to teaching and learning to meet these aims.

On the following pages is a summary of two BTT + Arts Integration Activities for mastering content, skills, and concepts included in this overlay.

Step-by-step directions and printable facilitation documents are included in the online resources.

Lesson 6: States of Matter Movement



1. Science Objective

Identify and differentiate between the physical properties of solids, liquids, and gasses.

2. Artform

Theater Improvisation

3. Activity Summary

Students use movement to understand the physical properties of solids, liquids, and gasses. The activity involves an improvised molecule dance where students will embody the characteristics and type of movements associated with each state of matter. The class will be divided into three groups, with each group assigned to represent one state of matter. Through creative movement, students will demonstrate their understanding of how molecules are structured in solids, liquids, and gasses.

4. Evaluation (Brain-Target 6)

Observation (Formative Assessment):

- Accuracy of Representation: How well did the group represent the physical properties of their assigned state of matter in the improvised dance?
- <u>Collaboration:</u> Evaluate how well the group worked together to convey the concepts through movement.

Lesson 12: "Twinkle, Twinkle, Chemical Star"

1. Science Objective

Understand the difference between heating and cooling in the context of chemical properties, specifically recognizing that heating and cooling can lead to physical changes (no new substance formed) and chemical changes (new substance formed).

2. Artform

Music (Song Adaptation) and Theatre Improvisation

3. Activity Summary

Students will engage in a song and movement activity to differentiate between heating and cooling in relation to chemical properties. Using the tune of "Twinkle, Twinkle, Little Star," students will learn an adapted version to help them understand and remember the difference between physical changes and chemical changes. The activity will incorporate simple movements or gestures to enhance understanding. The class will have the opportunity to act out scenarios representing physical and chemical changes through theater improvisation.

4. Evaluation (Brain-Target 6)

- Observation: As students perform the song and accompanying gestures, circulate around the room and note how accurately they use gestures that represent heating, cooling, and changes in chemical properties.
- <u>"Think-Pair-Share" Reflection</u>: After the song, have students turn to a
 partner to discuss a question like, "What's one example of a chemical
 change we acted out, and what made it different from a physical
 change?" This helps you gauge their understanding through their
 explanations to each other.
- Quick Draw Exit Slip: At the end of the activity, give each student a sticky note or a small piece of paper. Ask them to do a quick sketch or write a one-sentence summary of either a chemical or physical change they acted out. Collect these as an exit slip to quickly assess individual understanding.

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Brain Target 5: **Application of Knowledge**

BT 5 seeks to strengthen deeper thinking and learning by applying skills and content in meaningful, active, real-world tasks.

Provided on the next page is a Design Challenge extension opportunity to allow students greater application of what they have learned throughout the SABES unit.



Lesson 20: Preservation Props

1. Science Objective

Explore food science by investigating which materials are most effective in keeping different foods (bread, tomatoes, noodles) fresh and edible.

2. Artform

Theater Improvisation with Props

3. Activity Summary

Students will engage in a hands-on exploration of food preservation using the improvisational technique "Yes And...". Each student or group will be given a piece of food (e.g., bread, tomatoes, noodles) and various materials as props (e.g., plastic wrap, foil, containers). The task is to collaboratively improvise scenarios where they explore and decide which material is most effective in keeping their assigned food item fresh and edible. The "Yes And..." technique encourages students to build on each other's ideas, fostering creativity and critical thinking in the context of food preservation.

4. Evaluation (Brain-Target 6)

- <u>Critical Thinking:</u> Assess students' ability to analyze and discuss the effectiveness of different materials in preserving various foods.
- <u>Collaboration:</u> Evaluate how well students work together in the improvisational scenarios, building on each other's ideas.
- <u>Understanding:</u> Gauge the depth of understanding regarding food preservation concepts demonstrated through the improvisational activities.
- <u>Use of Props:</u> Observe how students creatively incorporate and utilize props to represent different materials in the scenarios.

Brain Target 6: Evaluation and Assessment

Evaluating instruction is as important to the learning process as meaningful learning activities. BTT emphasizes that relevant and timely evaluation is an ongoing, two-way process that begins almost as soon as the students' first introduction to a learning unit.

For this reason, aligned evaluation methods and materials that meet the criteria of both the science and arts standards have been included in each activity.