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Brain Breaks and Kinesthetic Learning: How Implementing These Strategies Help Students after the Covid "Lost Year"



I began my student teaching in July of 2021 at a rural middle school in East Tennessee. Even though students wouldn't be in school until the start of August, I spent this time getting to know my mentor teacher and attending meetings. During the beginning of the year meetings the main focus was how teachers could help with closing the learning gaps which had expanded through covid (a.k.a "the lost year"). Learning gaps are identified by looking at results from the previous year's standardized test data (i.e., Tennessee Comprehensive Assessment Program (TCAP)), and comparing what a student has actually learned to what he or she was expected to learn at their grade level.

As students returned back to the school building for the first time in over a year and a half, it didn't take long for the faculty to notice the effects said learning gaps had on students. Once the previous year's TCAP scores were compared with the beginning of the year benchmark assessments, scores indicated that the majority of our student body were not functioning on grade level. Many students would need to be retaught the standards from the previous year in order for them to reach the current standards for their new grade level. Although students' assessments suggested that they would need extra academic support this year, students' excitement to be back in the classroom was quite apparent during the first few weeks. I personally witnessed students excited to be back as they wanted to volunteer to read aloud, answering questions, and having them show up to class consistently.

If teachers were going to be proactive in decreasing the learning gaps students faced, it would be crucial for students to not only desire to be in class again but stay engaged while doing so. However, as the 2nd 9 weeks of the school year began, I witnessed students begin to disengage. Many students seemed to tune out midway through a PowerPoint or have headphones in while heads were laid on desks. In hopes to combat the increasing disinterest in the classroom, my mentor teacher began implementing more engagement focused activities and strategies during her lessons. My residency supervisor had also suggested implementing various styles of "brain breaks" during lessons where I knew I'd be spending large segments lecturing students.

I saw the difference in my student engagement when introducing brain breaks and kinesthetic activities into my lessons. Not only were they sleeping less and zoning-out less frequently, but they seemed to be grasping the material better and more confidently. It has been said that teaching pre and post pandemic are two completely different worlds. If school boards want to see improvement in student learning and closing of learning gaps, different strategies should be tried within the classroom to determine possible solutions for our students that provide a beneficial learning environment. I decided to look more into the benefits of implementing brain breaks and kinesthetic activities during lessons and how it affects students overall. I wanted to share some of those findings with you...

1. What are "Brain Breaks?"

 Stretch it out: It's never a good idea to spend too much time sitting in one position. Allow kids to take a break during a transition point in the lesson and bring some flexibility back into their spines.



• Stir the pot: Have kids visualize they are

standing in front of an enormous cauldron. Inside the cauldron is an ooey-gooey pot of caramel. Take hold of a large stirrer and plunge it to the bottom of the pot. Slowly begin to stir in a clockwise direction. Have them use their whole body to help get a full range of motion in their wrists and shoulders. Instruct them to throw their hips into the action. After a minute or two, reverse the direction.

• Make it rain: Conjure up a rainstorm! Sitting or standing at a desk or table, have kids tap 1 finger on the desk, then 2, then 3, then 4, then their whole hand until you all feel like you're in the middle of a deluge. Work your way backward from 5 down to 1 as the storm ebbs away.

All of the activities listed are quick and easy examples of brain break activities you can try in the classroom to help with student engagement! According to Dr. Selena Kiser (Second grade teacher; Ed.D. in Educational Leadership & Policy Analysis), a brain break is a "small mental break designed to help students focus and attend. Brain breaks are targeted to get students moving and allow blood and oxygen to flow to the brain. These breaks allow students a small reset in the day and enhance energy. The enhancement in energy can then be redirected toward the lesson and assist in engagement.

Brain breaks benefit students of all ages ranging from Pre-K through college. Brain breaks can also positively impact our emotional states. The hippocampus can only process so much information at once. To help students better process said information, brain breaks allow a few minutes for both the student and teacher to reset, (Yes, brain breaks are also effective for the teacher as well!). Opportunities to reset and shake off some of that "midday tired" allows development of creativity and social skills, while also helping the teacher to be in a better state of mind and conduct their lesson more effectively.

Some research states that doubling students' chronological age is comparable to their attention span. Meaning, a 7-year old's attention span would be approximately 14 minutes. Picture a teacher needing to spend 30 minutes going over new vocabulary with their class of 7-year old's. If this teacher knows that students will likely disengage after listening to 14-15 minutes of her lecturing over new vocabulary, it could be helpful for her to schedule a brain break so that students refocus and engage with the new material. Understanding the rationale for brain breaks helps educators navigate and structure lessons that allow content to be efficiently retained by students. Brain breaks assist with students not feeling overwhelmed with all the content they receive within the average 90minute class time. Thus, students are more equipped to meet the lesson objectives and perform at or above grade level.

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Step Into the Classroom:

There is endless brain break ideas and activities to try. However, it is important that students engage in these breaks before they become distracted or tired. A good way to navigate this if you're a teacher is by pre-scheduling them into lessons. Tip: Set a timer to ensure they are implemented!

One example to try during class is an activity called "Take a cue from the stadium." "Take a cue from the stadium" is great for a group of kids. The premise of this activity is simple: start the wave! To start, begin at one end of the room, have the kids stand up and throw their arms overhead, bringing them back down as they return to their seats. Each row follows until you reach the other end of the room. Amp it up by encouraging your kids to tap their feet or tap their hands on their legs so that they are in constant motion. This activity works great on Zoom as well if you have a class that is strictly online. There are countless options and activities that can be found online and then tried out within your own classroom.

Once students have experienced a handful of different brain break activities you could ask them which one, they'd like to do when the brain break comes for the current day's lesson. Letting students occasionally choose the brain break allows them to feel that they have a say in the lesson and their opinions are welcome. Brain breaks should be structured and planned in connection to the lesson objectives and standards being focused on per day. By connecting the lesson to the brain break it better enhances cognitive functioning and fosters the enjoyment of learning for students.

2. What is "Kinesthetic Learning?"

Kinesthetic learners process information best when they are **physically** engaged during the learning process. Kinesthetic strategies that assist with student engagement can be done in a variety of ways and benefit students of all learning categories. For example, try switching out the average seat in your classroom with an exercise ball. Balance ball chairs are a more stationary option that still allows movement. This is a great option for those students who you constantly find rocking or wiggling in their chairs. Introducing the balance ball chair is best utilized during middle and high school age when students should be able to recognize how much they move on the ball without creating a distraction to others.

Kinesthetic learning is one of the three different learning styles students may be categorized in according to how they learn best. This was popularized by New Zealand professor Neil D. Fleming in his VAK model of learning (**V**isual– A preference for seeing

material in order to learn it, **A**uditory– The student better absorbs information by hearing it, and **K**inesthetic– Learns by actively being involved in the process of a lesson). In essence, "kinesthetic learners process information best when they are physically engaged during the learning process" (Roell, 2018).

In Fleming's VAK model of learning, it is noted that often, students with a kinesthetic preferred learning style have a hard time learning through traditional lecture-based schooling. The reasoning for this struggle is because the



body does not make the connection that it is doing something when the student is listening **without** movement. The students' brains are engaged, but their bodies are not, resulting in difficulty in processing information. These types of learners may need to get up and move in order to put something to memory.

Kinesthetic learners have many strengths that help them be successful in the classroom including quick reactions, advanced motor memory, and high levels of energy. Knowing how to implement kinesthetic opportunities inside a classroom can certainly influence kinesthetic learners positively. Additionally, integrating kinesthetic learning activities into the class lesson allows for differentiated learning strategies for students they may be struggling with material being taught.

Step Into the Classroom:

Like brain breaks, kinesthetic learning strategies assist in strengthening students' comprehension, retention, and concentration both in the classroom or when studying on their own. Providing kinesthetic alternatives to a traditional classroom set up or planning lessons that have kinesthetic components allow students to receive similar benefits as they would during brain breaks without the teacher pausing instruction time.

One-way students are able to implement kinesthetic learning strategies on their own is by utilizing "small movements." Small Movements are helpful when standing up and moving around isn't an option. Students can still use kinesthetic study strategies that keep themselves engaged. This may include bouncing a tennis ball against the floor and catching it every time they answer a question or twisting a rubber band around their wrist or a pencil while reading. Even if the motions are small, they can stay focused and attentive.

Kinesthetic learners need to move their bodies in order to learn. These students are often labeled as "fidgety," and some teachers interpret their behavior as distracted or bored. However, the movement of a kinesthetic learner does not suggest a lack of attention—in fact, it means they're trying to process information in the most effective way possible. Teachers can implement a variety of strategies that will better suit their kinesthetic learners' needs. These implementations can be done in a variety of ways, such as: allowing kinesthetic learners to stand, bounce their legs, or doodle during lectures.

Students need variation in their learning to improve engagement, comprehension, retention, and concentration. If they are able to engage in class while simultaneously improving their learning functions their learning gaps will begin to close. In a post pandemic classroom implementing strategies such as brain breaks, and kinesthetic techniques may look a bit different. Teachers are encouraged to keep students approximately spaced among one another in order to better follow contact tracing regulations. Even with these hurdles, brain breaks, and kinesthetic learning activities can be altered to fit and work within the classroom. Taking the time to place them into class lessons can assist with keeping students engaged and present. These strategies change the view of students being empty vessels that need the teacher to fill them with knowledge and shift to viewing them as complex individuals that require various types of support to reach their full potential.

Work Cited

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