The Benefits of Breaks: Examining Brain Breaks and Learning Benefits

Graduate Research Thesis

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Abstract

The question of taking breaks in the classroom has been widely debated in art education with scholars such as Eric Jenson argues the seven benefits of incorporating movement in the classroom are needed for better student learning whole others like educational psychologist Jacob Kounin argues the opposite with his Ripple Effect concept that argues if one student does something wrong, a majority of students will follow instantaneously. However, these perspectives do not adequately address the outcomes of taking Brain Breaks in the classroom. My qualitative survey and interview research addresses these outcomes with specific attention to the positive outcomes like increased motivation, longer attention spans, enhanced teaching, and improved learning with regards to Brain Breaks being preformed in the classroom. Specifically, I look at the positive benefits of Brain Breaks and supports in the classroom in order to show how crucial these breaks really are due to the outcomes they produce in the classroom like increase attention and student interaction, and greater meaning making based on learned materials. I argue that Brain Breaks are needed for enhanced learning in the classroom and are crucial to student learning and not implementing these breaks, with their positive benefits found in my research, would be a disservice to your students. In conclusion, my research closely examines the benefits of Brain Breaks and sheds new light on the rarely acknowledged benefits of Brain Breaks.

Introduction

What if a resource existed that could help your students' focus, retain more knowledge, and implement their learning in new ways? This learning tactic does exist and is Brain Break. Brain Breaks are taking a one to three minute break from instruction to do something different, usually physical, and have a positive impact on learning and instruction with their ability help students learn by stopping and refocusing. If we know that such positive benefits result from such breaks, why are teachers not implementing them within their classrooms? In this paper, I examine the pros and cons of taking Brain Breaks in the art classroom. First, I will talk about the importance of my research. Second, will explain what a Brain Break is and how they benefit student learning. Third, I will talk about the theoretical framework of my research. After that I will go into methods and methodologies that I used in my research together with the participants I included in my study. Fourth, I will talk about my data findings were a majority of teachers surveyed said Brain Breaks have a positive role in the classroom. Finally, I will discuss the implications of my study and wrap up my thoughts on Brain Breaks in the Conclusion.

Statement of the Problem and Research Questions

When researching Brain Breaks and Attention I looked into two different aspects. The first aspect is students lacking the ability to pay attention in class and what teachers can do to help combat that. The second aspect is teachers having an abundance of recourses available but not using them while teaching. Using these two concepts, I developed research questions. The first research question is "What are some potential benefits of using Brain Breaks within an art education classroom?". The supporting research questions are "What are the positive and negative benefits of taking Brain Breaks within the art education classroom?" and "Are art

teachers already implementing Brain Breaks in their classrooms?". These questions were used as a starting point of my research and later became apart of the survey and interview process.

What is a Brain Break?

Educational Writer Janelle Cox defines a Brain Breaks as "a short mental break that is taken during regular interval during classroom instruction. Brain Breaks are usually limited to five minutes and work best when physical activities are incorporated" (Cox, 2016). Brain Breaks are most effective when used before, during, and/or after an activity by doing movements that incorporate dance, jumping, or moving and their main purpose is to help a child refocus and prepare the student to be able to concentrate better on any work that could be following (Cox, 2016). Brain Breaks are said to help with classroom management by helping students follow steps during transition periods (Cox, 2016). Cox (2016) suggests that kindergarten students should participate in Brain Breaks after five to ten minutes of instruction or when they begin to wiggle around in the classroom. For older students, Cox suggests taking Brain Breaks every twenty to thirty minutes. Next I will talk about general Brain Break examples.

General Brain Breaks

A basic search on Google for "Brain Breaks" yields thousands of results. There are videos, articles, and examples about Brain Breaks are right at your literal fingertips. This search yielded Brain Break results like GoNoodle, YouTube clips, and suggestions for custom Brain Breaks. Several opportunities and strategies are available on YouTube and provide videos like "Shake Your Sillies Out" which lasts three minutes and eight seconds. Brain Breaks are as simple as playing Simon Says, jumping jacks, and clapping while dancing to the student's favorite songs. *Teachers pay teachers* also has an abundance of free Brain Break ideas that are available to download. The list goes on and on of examples of Brain Breaks and a majority of

them work best for students when teachers participate too (Yes, teachers are encouraged to take Brain Breaks). In this section I have discussed what Brain Breaks are. In the next section I will discuss the theoretical framework and how it plays an important role within my research.

Theoretical Framework

When approaching the problem of attention in the classroom I am taking a positivist approach. According to researchers and authors Melanie Huffington and Sara McKay the positivist approach is used to help the researcher reach a truth or likely truth about the focus area that the study is about (Buffington, McKay, 2013). Huffington and McKay also state that the positivist researcher and teacher remain in a controlling and powerful role (Buffington, McKay, 2013). Not to get this confused with a constructivist paradigm that allows for multiple truths that exist simultaneously with others (p. 31). The positivist role fits my research study because I remain in control of the subjects and questions I asked in the survey and interview. I also am aim to find an ultimate truth about Brain Breaks. I will next go into the methodologies and methods of my research.

The Research: Surveys and Interviews

Background to the Study

For this study I conducted one interview and sent out one survey. I used the survey to get a broad range of ideas about Brain Breaks and used the interview to get a deeper look into how Brain Breaks are used within the art classroom. I conducted this research to find out if art education teachers are having attention issues in their classrooms and to see if any teachers are using and/or know the positive benefits of Brain Breaks. I now go into the methods I chose to use within my research and their importance and I start with the method of surveys.

Survey

According to art education professor and researcher David Burton (2001) "Questioning strategies reside at the heart of effective instruction in all subjects, including art education. Good questioning compels students to reflect, interpret think, and, ideally, answer with their own thoughts in their own words" (p.139). The survey allows participants to express themselves anonymously and provide answers back to my quickly. The survey I made contained the four questions that follow: 1. What are your thoughts about Brain Breaks? (taking a 1-3 minute break from teaching). 2. What are some potential positive benefits of taking breaks in the classroom? 3. What are some potential negatives of taking a break within a classroom? 4. If more information about brain breaks were available as well as quick and easy resources, would you use them more within the classroom? This method was perfect for my research because it allowed me to find out what people know about my Brain Breaks and how and if they are using them within their own classrooms. The next method I used is interviewing.

Interviews

The second method used is interviewing. Interviews with structure allow for consistency during questioning when they use open-ended and close-ended questions that remain the same for all interview subjects. "Interviews are useful when the researcher is seeking a person's perceptions about something or a person's internal experience of something" (Nolte, p. 56). I conducted interviews to receive in-depth information and help me grasp new insights about Brain Breaks more than the survey was able to. Next I will go into the design of my study.

The Who: Participants of the Study

Participants and Locations

For my study the participants are solely art education teachers in the western New York area. The survey was sent out to ten recipients via Facebook whom are all beginning art education teachers with a link that takes each participant to the four-question survey. The answers were given anonymously and not all participants answered every question. I also conducted one interview with Molly Johnson[1], my student teaching school based teacher educator who teaches at an unban elementary school located in western New York. Molly has been teaching art education for 16 years and picked for the interview because I was able to work one on one with her for 6 weeks during my student teaching placement and we were able to discuss Brain Breaks during that time. My personal reflections on Brain Breaks also came from this six-week period as well as six weeks that were spent at a rural high school in western New York. The interview with Molly took place via FaceTime and was later transcribed.

Data Findings

The first part of my research focused on the benefits of Brain Breaks. The first question of the survey was "What are some of the potential benefits of taking Brain Breaks in the classroom?".

The responses to this question within my survey are presented in figure 1.

[1] Personal Pseudonyms for all names

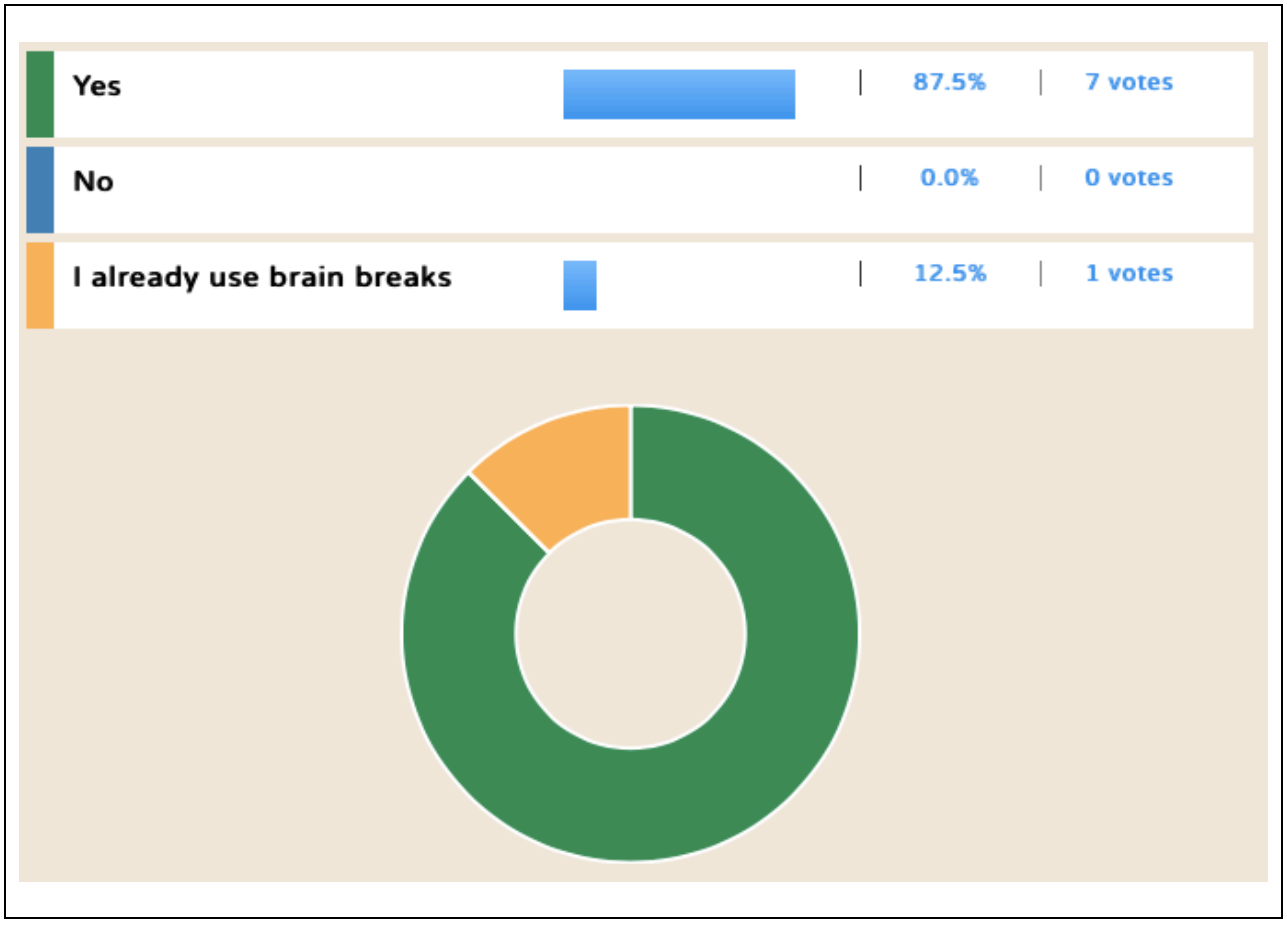
Figure 1:

Open ended answers in response to the question "What are some of the potential benefits of taking Brain Breaks in the classroom?
Answer 1: I think they are crucial, especially with younger students
Answer 2: Needed!!!
Answer 3: I find them beneficial for my students because they are able to reset their concentration. Many times to help the students use up excess energy or when I see they are flustered.
Answer 4: Increased concentration, less fidgeting, a chance to think and retain material, a chance to move your body.
Answer 5: Especially [needed] in the art room. It gives the students to take a step away from the artwork.
Answer 6: Think they're a good idea. And could be essential to everyone.
Answer 7: I teach elementary and developmentally students have trouble concentrating for large amounts of time. The brain break is positive for my classroom because I can use it as a way to allow them rest from a stressful day.
Answer 8: Increase in motivation, time limits increase productivity, decrease in stress and anxiety.
Answer 9: I feel it is necessary some days to reset your thoughts, and increase your motivation.
Answer 10: They are necessary for students, I need them when I am a student as well as when I am a teacher.

As seen in the answers above, the participants of this survey agree that Brain Breaks in the classroom increase motivation and focus. Not one teacher questioned what a Brain Break was, indicating that every art teacher who participated knows what a Brain Break is. These positive answers are also supported in my interview.

The last question of the survey is "If more information about Brain Breaks were available as well as quick and easy recourses, would you use them more often within the classroom?". Eight participants answered this question and the answers included "yes", "no", and "I already use Brain Breaks". The results are shown in Figure 2.

Figure 2:



This graph that was generated from the survey supports that the participants want easy access Brain Break recourses or already are using Brain Breaks in classrooms. The graph most importantly shows that no participants marked "no" when asked this question. This is significant because it shows that Brain Break materials are wanted or already being used in these participants classrooms.

In my interview Molly also supports the use of Brain Breaks. When asked " What are some potential benefits of taking Brain Breaks in the classroom?" She answered:

> You can have totally random Brain Breaks but you can also have Brain Breaks that cut into what you are covering. I have made up my own, like [using art] elements, or movement is another [method] for [students] to learn [these concepts], to ingrain [these concepts] in their heads and it helps [with] circulation, [my students have to be] able to sit for the in depth learning and the kids just need [a break], they have been holding it together all day they need those couple minutes every so often to just let it all out. (Molly Johnson, Interview Excerpt, January 28th, 2017)

When asked "What are your thoughts on Brain Breaks, just taking a one to three minute break from teaching?" Molly also stated:

> I think it is great, I think especially with testing and the longer [learning segments], with everything that happens during the day I think giving students that little bit of wiggle room and a little bit of time [to break] is huge. There is never enough time to give them just to be silly and goofy for a couple seconds and to be able to reset themselves. (Molly Johnson, Interview Excerpt, January 28th, 2017)

Molly supports Brain Breaks not only for her students to regain focus but to help reinforce what she is teaching. She uses the example of students learning about movement as an art principle by

doing a Brain Break that involved student movement. She is supporting her teaching with Brain Breaks and also giving the students a chance to be free from the restraints of their seats to learn. Along with Molly, I was able to personally see how were effective within the art classroom.

During my student teaching semester I had the opportunity to work within an elementary art classroom and a high school art classroom. During this time I was able to implement Brain Breaks to both age groups and have success. In the elementary school I would implement transitional Brain Breaks where I would allow students to get up and move about the classroom while still preforming a task. I noticed that younger students adapted well to the breaks and there were little to no problems with refocusing when the lesson resumed. A quiet signal was used and students refocused again and were ready to work. I noticed the same occurrences with my high school students. One of my ninth grade studios was divided into two different sections. The students came to class from 9:35-10:00, left for lunch at 10:00 and returned at 10:30 and class would resume from 10:35 until 11:05. Without knowing, this pause in learning was a significant Brain Break without planning. Even this break is not by definition of a Brain Break (last 1-3 minutes), it demonstrates the positive learning environment that comes after students take a break from learning and really take the opportunity to recharge students for the rest of the day. When I was able to see this class during my day, I would plan a lesson that could be divided into parts. A majority of the time I would teach the instructional input prior to the break and then when classes returned I would allow for a refresher on materials and then allow for idea development. Next, I will discuss the outcomes from my research.

The Findings

These positive outcomes in findings are supported by Eric Jensen's (2000) theory of movement in the classroom. His theory is broken into seven different concepts that support

movement in the classrooms and Brain Breaks. The first component is circulation and how increased movement allows more blood flow and increases focus (Jenson, 2000, p. 34). The second is episodic encoding and according to Jenson (2000) episodic encoding is the student's special reference to the room and how changing ones position in the room can help an individual learn better (p. 34). Third is a break from learning. Jenson (2000) states the time not learning is just as important as the time spent learning. He states "most educators feel pressured to cover more material in the time allotted, but doing so is a serious mistake. You can pour all the water you want from a jug into a glass, but the glass can only hold so much" (Jenson 2000, p.34). Jenson means that by over teaching a student in a short amount of time could possibly be damaging to their learning. The fourth is system maturation. The maturation of the brain causes areas to go as well as shrink. This change in an individual's brain causes greater need for content breaks as well as cognitive remapping. Jenson (2000) states that students "need more, not fewer, breaks from learning" (p. 34). Fifth being good chemicals. Jenson (2000) points out "certain kinds of movements can stimulate a release of the bodies natural motivators" noradrenaline and dopamine (p. 34). Jenson also states: A very short break or energizer increases arousal, but longer breaks allow the learner to be aroused and then come back to a more sustainable level of energy (Jenson, 2000, p. 35). The sixth benefit of moving is too much sitting and the value of implicit learning. Too much sitting in a classroom causes overall body fatigue that is bad for learning (Jenson, 2000, p.35). Seventh, and final, is the value of implicit learning is learning from being in an environment and responding to the environment itself. Jenson's (2000) main point is "we are more likely to remember implicit learning. It is robust, easy to learn, cross-cultural, efficient, and effective–regardless of our age of level of intelligence (p. 36). Jenson's seven concepts all support the Brain Breaks and their use within the classroom,

as they are theory that supports movement and learning, which is exactly what Brain Breaks do for students and teachers in the classroom.

The Importance of the Findings

Findings to Self

My findings supported the positive effects of breaks in the classroom, but why is that important to me? These breaks not only help me as a teacher with my students but they help me as a student myself. For example, when writing papers I cannot sit down in one ten hour session and write a ten-page paper. It is just not possible for me. Knowing that breaks have positive effects helps support my learning as a student. I allow myself to take breaks in accordance to when I think I need them without feeling like I am in the wrong. Brain Breaks in my learning is supported by The Coalition for Action in Literacy Education that states a students attention span is broken down into the formula "Attention Span for Learning = Chronological Age + 1" ("Behavior"). According to this formula my attention span would be twenty-five minutes. I find that when I am writing or working, I am able to focus for the full twenty-five minutes depending on what I am working with. There are also times when I need a break prior to twenty-five minutes. Keeping this formula in mind is important on a person level because it helps better my learning by allowing breaks that is supported by theory.

Knowing how you work best is also important for success as student and teacher. For example, I know I work best in a quiet room with music. I also know that I can only work for an extended amount of time before I need to stand up and walk around. By including these factors into my working routine, I create the best environment for personal growth. I also believe everyone can use this strategy to heighten their success in their own personal lives, and who would not want that?

Findings to Teachers Like Me

Teachers teach to the best of their abilities in their classrooms. When I think about incorporating Brain Breaks in the classroom I think about how they are incorporated into classroom routines. Classroom routines allow for this high level of success for not only the teachers but the students as well. Higher Education Theorist Rob Jenkins (2015) states that there are Seven Fundamental Conditions of Learning that allows students to learn best and teachers to teach best. These Seven Fundamental Conditions are Awareness, Interest, Motivation, Relevance, Engagement, Reinforcement, and Support (2015). Teachers are teaching to this theory to have successful students. Brain Breaks could promote more success included in this theory. These routines are already in place in a majority of classrooms, so why are Brain Breaks not? If you know something is positive for student learning why would a teacher not use them. Brain Breaks reinforce this learning and theory when they are implemented.

Findings to Artists

The Brain Break findings relate to artists based on the manner in which they work. According to Author Mason Currey (2013), artists of all types work best went they develop routines when creating. This is supported in his book *Daily Routines: How Artists Work* . This book asks filmmakers, painters, choreographers, and architects about how they boost their energy when creating and the routines they do that allowed them to be successful when making. The routines included avoiding distractions, exercise, having alcohol after creating, always drinking coffee prior to creating, and swimming for the different artists included in the book. The routines these artists are using could be considered Brain Breaks as they help the artists to break from work. This relates to my research as it shows Brain Breaks are not just successful in

the classroom and to students. Artists use routines and breaks to improve their creating and thinking.

But…

In my research there were comments on how Brain Breaks are not for every student. Others commented that these breaks might take up needed class time and students might not be able to regain focus after the break. The control however still remains in the teacher's hands whether or not to use these breaks. If you sacrifice the three minutes to try a Brain Break and have success, the negative results of my research negate themselves. If you have failure, you have research and theory that supports you. If the breaks you are using do not work, try a new one. It is important to know your students and do what is best for their learning in your classroom in addition to what works best for you in your classroom.

What Now?

Try, try, and try some more. We know that breaks within the classroom have positive effects in the art classroom. We also know that they not only benefit teachers but artists and creators. All teachers have the potential to better their teaching with these breaks. The only question that remains is why these breaks are not taught to everyone to better their own learning in everything we do?

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