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Brain Breaks and Student Engagement

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Brain Breaks and Student Engagement

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Research Question

- How does incorporating brain breaks promote student engagement in the classroom?
- *Brain breaks* can be defined as short physical activities incorporated into the classroom (Fedewa et. al., 2015).
- I focused on physical, cognitive, and emotional forms of *engagement*.

Literature Review

- Camahalan and Ipock (2015) note that throughout the week in which they incorporated brain breaks into the classroom, they had less students fidgeting and causing distractions. The brain breaks were in the form of stretching, dancing, games, and gymnastic exercises (Camahalan and Ipock, 2015).
- Mahar et al. (2006) found that students' on-task behavior improved more between pre-energizer and post-energizer [energizer: short classroom-based physical activity] than it did between pre-break and post-break, which showed no significant improvement.
- Schmidt et al. (2016) discuss how their findings suggest that short cognitive engagement activities lead to improvements in student attentiveness at school.

Methodology

- 26 first grade students from a rural town in central Illinois. Four students had IEPs, two specifically for speech, one for social/emotional and speech, and one for academic, social emotional, and speech.
- Data was collected through field notes and anecdotal notes taken during student teaching.
- Data was analyzed through coding of participation in brain breaks, behavior before/during/after brain breaks, and the type of brain break being conducted.

Results and Data Analysis

- The brain breaks I conducted included GoNoodle videos of varying types (fast paced guided dancing to calming yoga) as well as a brain break station that I implemented in the classroom (see *Figure 1*).
- My findings showed that the students were physically engaged the most during the upbeat songs with guided dancing/movements.
- The brain breaks that yielded the most participation were those that were content-integrated videos relating to the curriculum, demonstrating cognitive engagement in the classroom.
- Those that actively participated in brain breaks were the most cognitively engaged in lessons and activities that followed. This was true for whole-class brain breaks and the use of the brain break station.
- Some students were able to be self-reflective on their need for a brain break throughout the day by using the brain break station as well as articulating the need for a whole-class brain break, showing their emotional engagement.

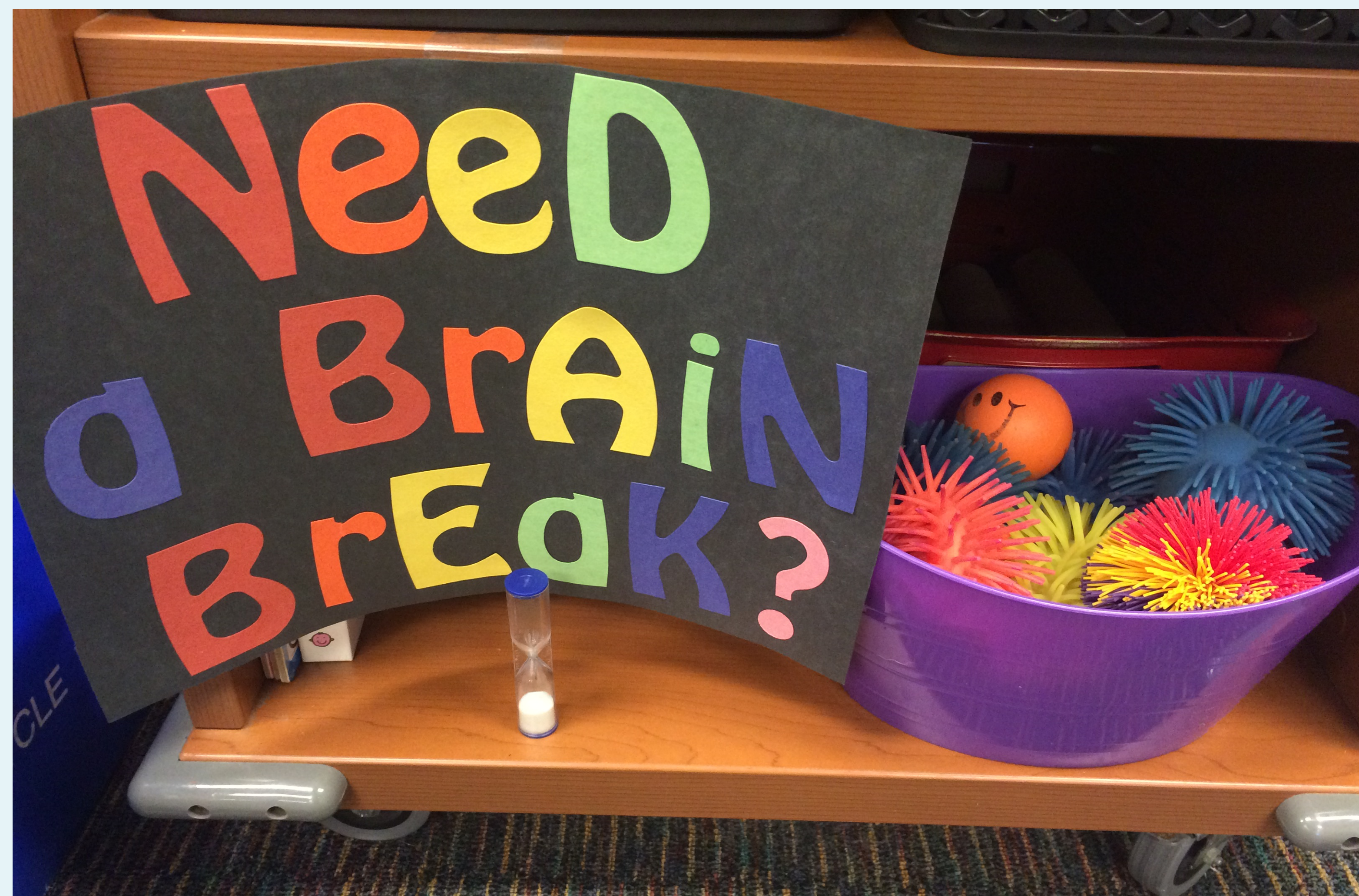


Figure 1. This is the brain break station that I implemented during student teaching. Students were able to play with the brain break balls, or 3Bs as we called them, for one minute at a time. We had a class discussion on how to know when you need a brain break prior to implementing the station. The brain break station was located on a shelf in the classroom in a non-distracting area.

Conclusion

- Overall, through my research I found that students became more engaged in lessons and activities in the classroom when brain breaks were integrated into the everyday routine.
- I did not collect data of student work before and after brain breaks for comparison. Therefore, I do not have evidence of the influence they have on academic performance.
- Since brain breaks are still new, there is little research that has been conducted on their impact in classrooms. Further research could include how brain breaks influence students' self-awareness as learners within a classroom setting.