

# Enhancing the Short Attention Span of Grade 2 Learners Using the “Brain Break” Strategy (BBS)

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## Introduction

According to the words of Asprilla (2020), learning is intricately linked to an individual's capacity to concentrate and pay attention to educational tasks. Sustaining attention for a duration of time is particularly crucial around the ages of 6 and 7. Asprilla (2020) added that the learners' transition from kindergarten to elementary school requires a big adjustment. In kindergarten, learning includes more time for playing. Meanwhile, grade school classes emphasize learning overplay, and the knowledge presented is more challenging. The learners are required to sit longer and focus on the lecture.

There is a common belief that more excellent learning occurs when one is entirely concentrated on a task. Now, this is only possible if the learner's attention span is short. The teacher aims to sustain attention, with the expectation that ideas be more effectively assimilated and comprehended. Millares (2012) stated that, for anyone who works with children aged 5 to 7, consistently capturing and maintaining a child's focus during a lesson is an ongoing difficulty. Children possess an innate ability to acquire knowledge about their surroundings and assimilate information rapidly when given the freedom to explore independently. However, when they are instructed to study a specific lesson, the presence of distractions hinders their learning process, making it more challenging. Teachers must be equipped to address disruptive behaviors that indicate a decrease in attention.

According to a study by Anderson and Anderson (2020), the average attention span of first-grade learners during controlled learning activities is usually between 10 to 15 minutes. If the attention of the learners began to fade simultaneously, the learners began to show signs or unnecessary movements like fidgeting, excessive hand or body movements, rocking or swaying, tapping or drumming, and playing with objects. It can even go as far as running around during a discussion. Grade 2 learners also show different kinds of classroom behaviors, such as on-task, off-task, prosocial, disruptive, and withdrawn behavior.

In the words of Pellegrini (1995), A brain break approach refers to a quick and purposeful stop in classroom instruction or activities to allow pupils a short period to relax, regain energy, and redirect their focus. These breaks frequently incorporate physical movement, relaxation exercises, or short mental activities to assist learners in remaining engaged and sustaining maximum cognitive performance.

## Research Questions

This study aims to determine the attention spans of grade 2 learners before and after implementing the Brain Break Strategy in the Elementary Secondary Laboratory at Bukidnon State University.

Aims to answer the following questions:

1. What manifestations of short attention span were shown by the grade 2 learners before using the BBS.
  - 1.1 How often do grade 2 learners manifest behaviors of short attention span before BBS?
2. How often do grade 2 learners manifest behaviors of short attention span during BBS?
3. Is there a difference in the behavior of the learners before and during BBS?

## Hypothesis

There is no significant difference in the total of unnecessary movements / behaviors of the Grade 2 learners' attention span before and during the implementation of Brain Break Strategy

## II. Literature

### *Attention Span*

According to the American Psychological Association (2024), attention span is when an individual can concentrate on a specific topic or activity without diverting or losing attention. *Sustained attention* is a metric that measures an individual's ability to keep cognitive focus on specific stimuli or tasks for an extended period.

### *Learners' unnecessary movements*

When the brain wanders off, this is a sign that the learner's attention has reached its limits and is now searching for new things to do. When this happens, many things are evident, such as fidgeting, excessive hand or body movements, rocking or swaying, tapping or drumming, and playing with objects. According to Reynold (2019), fidgeting involves iterative or agitated motions such as finger tapping, leg swinging, or seat moving without a discernible objective (Reynolds et al., 2019). In Excessive hand or body movements there are specific learners may display superfluous hand or body motions that are unrelated to the learning activity, such as gesticulating with their arms, squirming in their seats, or walking back and forth in the classroom (Reid et al., 2017). Rocking or swaying actions, exhibited by specific learners while seated or standing can be disruptive to both themselves and others in the classroom (Dunlap et al., 2015). Learners may exhibit repetitive tapping or drumming behaviors on various surfaces, including desks, chairs, or their bodies. These behaviors can disrupt the learning environment (Stewart & Barnes-Holmes, 2016). Engaging in object manipulation: This refers to extraneous movements involving things like pencils, erasers, or classroom materials rather than concentrating on the instructional activities at hand (Morrison et al., 2020).

### *Learners' Behavior*

There are also different kinds of behaviors of learners. On-task behavior pertains to the actions learners exhibit when actively involved in activities directly connected to the lesson or task being conducted. These actions include intently listening, actively participating in conversations, and successfully finishing assigned work (Harrison & Walker, 2018). Off-task conduct refers to actions exhibited by learners that do not align with the planned learning activities. Such behavior includes daydreaming, engaging in unauthorized conversations with peers, or playing with objects irrelevant to the lesson (Zimmerman & Kitsantas, 2014). Prosocial conduct refers to positive social interactions with classmates and teachers, such as assisting, sharing resources, and collaborating effectively during group activities (Koomen et al., 2012). Disruptive behavior refers to actions that disturb the educational setting, such as speaking out of turn, interrupting the teacher or classmates, and engaging in physical aggressiveness (McIntosh et al., 2014). Withdrawn conduct refers to the acts of young learners who choose to isolate themselves or withdraw from social interactions and learning activities. This can include sitting alone during group work or avoiding involvement in class discussions (Ladd & Burgess, 2001).

### *Brain Break Strategy*

In the words of Pellegrini (1995), a brain break approach refers to a quick and purposeful stop in classroom instruction or activities to allow pupils a short period to relax, regain energy, and redirect their focus. These breaks frequently incorporate physical movement, relaxation exercises, or short mental activities to assist young learners in remaining engaged and sustaining maximum cognitive performance. There are different kinds of brain break activities, for example, physical activity breaks, mindfulness or relaxation breaks, brain teasers or cognitive games, yoga or stretching breaks, nature breaks, breathing exercises, music breaks, artistic expression breaks, interactive games, and sensory breaks. According to Mahar (2006), Physical activity breaks are brief intervals of physical exercise, such as stretching, jumping jacks, or dancing. In the study of Schonert-Reichl (2010), mindfulness or relaxation breaks include utilizing guided relaxation exercises, engaging in deep breathing techniques, or practicing mindfulness activities to facilitate relaxation and alleviate stress. Akhateeb (2020) defines *brain teasers* as cognitive games that encourage young learners to participate in concise cognitive exercises such as puzzles, riddles, or trivia questions. Yoga and stretching breaks were defined by Butzer (2015), as instructing young learners in mild yoga positions or stretching activities to enhance relaxation, improve flexibility, improve mood, and clear the mind. Chawla

(2014) said that nature breaks give young learners time to walk briefly outside to observe or explore nature. According to Ferguson's (2019) definition of Breathing exercises, basic breathing techniques like belly breathing or square breathing can effectively control emotions and alleviate stress. *Music breaks* are defined by Rickard (2013) as breaks where calming or energizing music is played, which allows young learners to move or dance freely for a short period. Artistic expression breaks in the words of Kaimal (2017), where young learners are free to express their creative sides by drawing, coloring, or crafting. Harris (2019) defined *interactive games* as concise games or team-building exercises promoting collaborative and interpersonal engagement. Moreover, the sensory breaks, in the words of Muller-Kuhaneck (2007), Offering sensory stimuli such as touchable materials, containers filled with sensory objects, or designated paths can assist pupils in managing their sensory systems and redirecting their concentration. All of these breaks are to release stress and pressure from the mind and improve concentration and focus.

### III. Scope and Limitation

This study was conducted at Bukidnon State University—Elementary Laboratory School. It was limited only to the Brain Break Strategy's effect on the attention span of Grade 2 learners during class lessons. The scope of this research is limited to the observation and analysis of the behavior of Grade 2 learners during lesson discussions. The research was concluded during the third quarter of the school year 2023 – 2024. The participants are limited to those currently enrolled in Grade 2 sections Humpty Dumpty and Jack and Jill.

### IV. Methodology

#### Research Design

The design used in this study is a descriptive quantitative method to observe the level of attention span of the pupils before and after implementing the Brain Break Strategy during the lesson discussion in Grade 2. Fox and Bayat (2017) define *descriptive research* as a method that uses data collection to provide a more comprehensive description of present issues or problems, surpassing what could be achieved without applying this approach.

#### Research Locale

The study was conducted at the Elementary Laboratory School of Bukidnon State University. The elementary laboratory school is headed by Dr. Mario C. Gemota as the principal. This action research is focused on Grade 2 Humpty Dumpty and Jack and Jill, whose advisers are Ma'am Maria Zaida Caterial and Ma'am Vangie Abarcas.

#### Population and Sample

The participants of this quantitative study were the 34 Grade 2, Humpty Dumpty, and 25 Jack and Jill young learners in BukSU – Elementary Laboratory School. These participants had an equal chance of participating in the implementation of the Brain Break Strategy. The entire 59 Grade 2 section Humpty Dumpty and section Jack and Jill learners at the BuKSU Elementary Laboratory School participated in this study.

#### Data Gathering

The researchers utilized different methods to gather the data. First, for the first week, the researcher conducted an observation on a typical class setup without the use of BBS to identify the behavioral problems that occur and the pupils' short attention spans. Second, during the second week, the researchers implemented the Brain Break Strategy during the transition of lessons.

#### Data Analysis

In this study, the researchers used descriptive analysis. In doing so, they carried out the following tasks step-by-step: Initially, the researchers prepared the data for analysis. Next, they selected the most appropriate table to represent the data. Finally, the data was interpreted, and findings were compared with information from the theories and literature.

#### Statistical Treatment of Data

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The statistical used on data gathered was frequency count distribution.

## V. Results and Discussion

Table 1. Unnecessary movements/ behaviors of Grade 2 Humpty Dumpty learners before BBS was implemented.

Week 1 Observation ( Day 1)				
Attention Span	5 mins	10 mins	15 mins	20 mins
1. Tapping of hands in the table	0	0	4	4
2. Talking to seatmates.	0	3	4	6
3. Playing with random things.	0	1	3	4
4. Walking around the classroom.	0	0	1	2
5. Looking in the windows.	0	4	2	6
6. Making jokes.	1	1	2	4
7. Sleeping	0	1	3	4
8. Shouting	0	0	2	4
9. Touching other classmates.	3	2	4	6
Total:	4	12	27	30
Total unnecessary movements/ behaviors: 73				
<b>Percentage:</b>	<b>5.6%</b>	<b>16.4%</b>	<b>37%</b>	<b>41%</b>

During the lesson discussion in Week 1, before implementing the BBS in Grade 2 Humpty Dumpty, the learners showed 73 unnecessary movements and behaviors as a manifestation of faded attention during class discussion. Five minutes into the lesson discussion, 5.6% of the total unnecessary movements / behaviors the learners manifested signs of faded attention, 3 times when some of the learners touched their classmates, and one time a learner made jokes. Ten minutes into lesson discussion, 16.4% of the total unnecessary movements / behaviors the learners manifested signs of faded attention , four times when the learners looked outside the windows, three times some of the learners talked to their seatmates, two times some of the learners touched their classmates, one time a learner talked to their seatmates, one time a learner played with random things, one time a learner made jokes and one time a learner slept. Fifteen minutes into lesson discussion, 37% of the total unnecessary movements / behaviors the learners manifested signs of faded attention, four times some of the learners tapped their hands on their tables and four times some of the learners talked to their seatmates. Another four times, some of the learners touched their classmates. Three times, some of the learners played with random things; another 3 times, some of the learners slept. 2 times, some of the learners looked outside the windows; two times, some of the learners made jokes; another two times, some of the learners shouted, and one time a learner walked around the classroom. Twenty minutes into the discussion, 41% of the total unnecessary movements / behaviors the learners manifested signs of faded attention, six times of which some of the learners talked to their seatmates, six times some looked outside the windows, and six times some touched their classmates. Four times, some of the learners tapped their hands on their tables, and four times, some played with random things. Four times, some learners made jokes; four times, some slept; another four times, some shouted; and two times, some walked around the classroom.

Table 2. Unnecessary movements/ behaviors of Grade 2 Humpty Dumpty learners before BBS was implemented.

Week 1 Observation ( Day 2)				
Attention Span	5 mins	10 mins	15 mins	20 mins
1. Tapping of hands in the table	2	4	5	8
2. Talking to seatmates.	2	5	6	10
3. Playing with random things.	1	3	4	6
4. Walking around the classroom.	0	1	1	2
5. Looking in the windows.	2	2	5	8
6. Making jokes.	1	2	2	2
7. Sleeping	0	1	5	9
8. Shouting	0	2	3	3
9. Touching other classmates.	1	3	5	6
Total:	9	20	36	54
<b>Total unnecessary movements/ behaviors: 119</b>				
<b>Percentage</b>	<b>7.6%</b>	<b>17%</b>	<b>30.3%</b>	<b>45.10%</b>

During the lesson discussion in Week 1 Observation (Day 2) before the implementation of the BBS in Grade 2 Humpty Dumpty, there were 192 total unnecessary movements and behaviors shown by the learners as a manifestation of faded attention during class discussion. Five minutes into lesson discussion, 7.6% of the total unnecessary movements/ behaviors the learners manifested as signs of faded attention, two times which there were some learners tapped their hands at the table, two times some learners talked to their classmates, another two times some learners looked in the windows, and one time a learner played with random things. One time, a learner touched their other classmates.

Ten minutes into lesson discussion, 17% of the total unnecessary movements/ behaviors the learners manifested as signs of faded attention, five times of which some of the learners talked to their seatmates, four times some of the learners tapped their hands on the table, three times some of the learners played with random things, three times some of the learners touched their classmates, two times some of the learners looked outside the windows, two times of the learners were made joke, one time a learner walked around the classroom, and one time a learner slept. Fifteen minutes into lesson discussion, 30.3% of the total unnecessary movements/ behaviors the learners manifested as signs of faded attention, six times the learners talked to their seatmates, five times the learners tapped their hands at the table, five times the learners looked in the windows, five times the learners slept, five times of the learners touched their other classmates, four times of the learners played with random things, three times of the learners shouted, two times of the learners made joke, one time a learner walked around the classroom.

Twenty minutes into lesson discussion, 45.10% of the total unnecessary movements/ behaviors the learners manifested as signs of faded attention, ten times of which some of the learners talked to their seatmates, nine times of the learners slept, eight times of the learners tapped their hands in the table, eight times of the learners looked in the windows, six times of the learners played with random things, another six times of the learners touched their classmates, three times of the learners shouted, two times of the learners walked around the classroom, two times of the learners made jokes.

Table 3. Unnecessary movements/ behaviors of Grade 2 Jack and Jill learners before BBS was implemented.

Week 1 Observation (Day 1)				
Attention Span	5 mins	10 mins	15 mins	20 mins
1. Tapping of hands in the table	0	0	4	4

2. Talking to seatmates.	0	3	2	4
3. Playing with random things.	0	0	4	6
4. Walking around the classroom.	0	0	3	5
5. Looking in the windows.	0	0	0	0
6. Making jokes.	0	0	2	2
7. Sleeping	0	0	0	0
8. Shouting	0	0	4	2
9. Touching other classmates.	0	4	3	0
Total	0	7	22	23
<b>Total unnecessary movements/behaviors: 52</b>				
<b>Percentage</b>	<b>0%</b>	<b>13.7%</b>	<b>42.07%</b>	<b>44.23%</b>

During the lesson discussion in Week 1 Observation (Day 1) before implementing the BBS in Grade 2 Jack and Jill, there were 52 total unnecessary movements and behaviors shown by the learners as a manifestation of faded attention during class discussion. Five minutes into the lesson discussion, 0% of the total unnecessary movements/ behaviors the learners manifested as signs of faded attention.

However, in the next 10 minutes of lesson discussion, 13.7% of the total unnecessary movements/ behaviors the learners manifested as signs of faded attention; four times, some of the learners touched their classmate, and 3 times, some of the learners began talking to their seatmates. Fifteen minutes into the lesson discussion, 42.07% of the total unnecessary movements/ behaviors the learners manifested as signs of faded attention, four times some of the learners tapped their hands at the table, four times played with random things, and another four times some of the learners shouted.

Twenty minutes into lesson discussion, 44.23% of the total unnecessary movements/ behaviors the learners manifested as signs of faded attention, six times played with random things, five times some of the learners walked around the classroom, four times some of the learners tapped their hands in the table, another four times some of the learners talked to their seatmates, two times some of the learners made jokes, and two times some of the learners shouted.

Table 4. Unnecessary movements/ behaviors of Grade 2 Jack and Jill learners before BBS was implemented.

Week 1 Observation (Day 2)				
Attention Span	5 mins	10 mins	15 mins	20 mins
1. Tapping of hands in the table	0	0	5	8
2. Talking to seatmates.	0	4	4	8
3. Playing with random things.	0	0	3	4
4. Walking around the classroom.	0	0	0	4
5. Looking in the windows.	0	0	0	0
6. Making jokes.	0	0	0	1
7. Sleeping	0	0	0	0
8. Shouting	0	1	3	0
9. Touching other classmates.	0	2	0	3
Total:	0	7	15	28

<b>Total unnecessary movements and behaviors: 50</b>				
<b>Percentage:</b>	<b>0%</b>	<b>14%</b>	<b>30%</b>	<b>56%</b>

During the lesson discussion in Week 1 Observation (Day 2) before implementing the BBS in Grade 2 Jack and Jill, the learners showed 50 total unnecessary movements and behaviors as a manifestation of faded attention during class discussion. Five minutes into the lesson discussion, 0% of the total unnecessary movements/ behaviors the learners manifested as signs of faded attention. Ten minutes into the lesson discussion, 14% of the total unnecessary movements/ behaviors the learners manifested as signs of faded attention four times when some of the learners talked with their seatmates, two times when some of the learners touched their classmates, and one time when a learner shouted. Fifteen minutes into lesson discussion, 30% of the total unnecessary movements/ behaviors the learners manifested as signs of faded attention, five times of which some of the learners tapped their hands onto their tables, four times some of the learners talked to their classmates, and three times some of the learners played with random things. Another three times, some of the learners shouted; 20 minutes into the lesson discussion, 56% of the total unnecessary movements/ behaviors the learners manifested as signs of faded attention. Eight times, some of the learners tapped their hands on their tables, and another eight times, some of the learners talked to their seatmates; 4 times, some of the learners played with random things, and another four times, some of the learners played with random things, three times some of the learners touched their classmates, and one time a learner made jokes.

Table 5. Unnecessary movements/ behaviors of Grade 2 Humpty Dumpty learners during the implementation of BBS.

Week 2 Observation ( Day 1)				
Attention Span	5 mins	10 mins	15 mins	20 mins
1. Tapping of hands in the table	2	1	2	2
2. Talking to seatmates.	1	2	4	4
3. Playing with random things.	0	1	2	3
4. Walking around the classroom.	0	1	1	1
5. Looking in the windows.	4	2	2	4
6. Making jokes.	0	1	1	1
7. Sleeping	0	2	4	3
8. Shouting	0	4	3	5
9. Touching other classmates.	2	4	5	4
Total:	9	15	24	27
<b>Total unnecessary movements and behaviors: 75</b>				
<b>percentage</b>	<b>12%</b>	<b>20%</b>	<b>32%</b>	<b>36%</b>

During the lesson discussion in Week 2 Observation ( Day 1) during the implementation of the BBS in Grade 2 Humpty Dumpty, there were 75 total unnecessary movements and behaviors shown by the learners as a manifestation of faded attention during class discussion. Five minutes into lesson discussion, 12%% of the total unnecessary movements/ behaviors the learners manifested as signs of faded attention, four times of which there were some learners looked outside the windows, two times some learners tapped to their tables, another two times some learners touched their other classmates, and one time a learner talked to their classmates. Ten minutes into lesson discussion, 20% of the total unnecessary movements/ behaviors the learners manifested as signs of faded attention, four times of which some of the learners shouted, another four times some of the learners touched their classmates. 2 times some of the learners

talked to their seatmates, two times some of the learners looked outside the window, another 2 times some of the learners slept. One time, a learner tapped hands on their table; 1 time, a learner played with random things; 1 time, a learner walked around the classroom; 1 time, a learner made a joke. Fifteen minutes into the lesson discussion, 32% of the total unnecessary movements/ behaviors the learners manifested as signs of faded attention, five times when some of the learners touched other learners and four times when some talked with their seatmates. Another four times, some of the learners slept. 2 times, some of the learners tapped their hands; two times, some of the learners played with random things; and another two times, some looked outside the window. One time, a learner walked around the classroom, and another time, a learner made jokes. Twenty minutes into lesson discussion, 36% of the total unnecessary movements/ behaviors the learners manifested as signs of faded attention, five times of which some of the learners shouted, four times some of the learners talked to their classmates, four times some of the learners looked outside the window, another four times some of the learners touched their other classmates. Three times, some of the learners played with random things, and another three times, some of the learners slept. 2 times, some of the learners tapped their hands to their tables; 1 time, a learner walked around the classroom, and one time, a learner made jokes.

Table 6. Unnecessary movements/ behaviors of Grade 2 Humpty Dumpty learners during the implementation of BBS.

Week 2 Observation ( Day 2)				
Attention Span	5 mins	10 mins	15 mins	20 mins
1. Tapping of hands in the table	0	1	2	2
2. Talking to seatmates.	0	2	2	1
3. Playing with random things.	0	1	0	1
4. Walking around the classroom.	0	1	0	1
5. Looking in the windows.	2	3	2	3
6. Making jokes.	0	1	0	1
7. Sleeping	0	0	0	0
8. Shouting	2	2	1	2
9. Touching other classmates.	0	2	1	2
Total	2	13	8	13
<b>Total unnecessary movements and behaviors: 36</b>				
<b>percentage</b>	<b>5.56%</b>	<b>36.11%</b>	<b>22.22%</b>	<b>36.11%</b>

During the lesson discussion in Week 2 Observation ( Day 2) during the implementation of BBS in Grade 2 Humpty Dumpty, the learners showed 36 total unnecessary movements and behaviors as a manifestation of faded attention during class discussion. Five minutes into the lesson discussion, 5.56% of the total unnecessary movements/ behaviors the learners manifested as signs of faded attention, two times when some of the learners looked outside the windows, and another two times when some shouted. Ten minutes into lesson discussion, 36.11% of the total unnecessary movements/ behaviors the learners manifested as signs of faded attention, three times of which some of the learners looked outside the windows, two times some of the learners talked to their seatmates, two times some of the learners shouted, another two times some of the learners touched their classmates, one time a learner tapped their hands on their tables, one time some of the learners played with randoms things, one time some of the learners walked around the classroom, and one time some of the learners made jokes. Fifteen minutes into lesson discussion, 22.22% of the total unnecessary movements/ behaviors the learners manifested as signs of faded attention, two times of which some of the learners tapped their hands on their tables, and two times some of the learners talked to their seatmates. Another two times, some of the learners looked outside the windows, and one time, a learner shouted. Another time, a learner touched their classmates. Twenty minutes into

lesson discussion, 36.11% of the total unnecessary movements/ behaviors the learners manifested as signs of faded attention, three times of which some of the learners looked outside the windows, two times some of the learners tapped their hands on their tables, two times some of the learners shouted, another two times some of the learners touched their classmates, one time a learner talked to their seatmates, one time some of the learners played with random things, one time some of the learners walked around the classroom, and one time some of the learners made jokes.

Table 7. Unnecessary movements/ behaviors of Grade 2 Jack and Jill learners during the implementation of BBS.

Week 2 Observation ( Day 1)				
Attention Span	5 mins	10 mins	15 mins	20 mins
1. Tapping of hands in the table	0	1	2	1
2. Talking to seatmates.	0	2	1	2
3. Playing with random things.	0	0	0	1
4. Walking around the classroom.	0	1	1	1
5. Looking in the windows.	1	2	2	1
6. Making jokes.	0	0	1	1
7. Sleeping	0	0	0	0
8. Shouting	0	0	0	2
9. Touching other classmates.	1	1	2	0
Total:	2	7	7	9
<b>Total unnecessary movements and behaviors: 25</b>				
	<b>8%</b>	<b>28%</b>	<b>28%</b>	<b>36%</b>

During the lesson discussion in Week 2 Observation (Day 1) during the implementation of the BBS in Grade 2 Jack in Jill, there were 25 total unnecessary movements and behaviors shown by the learners as a manifestation of faded attention during class discussion. Five minutes into the lesson discussion, 8% of the total unnecessary movements/ behaviors the learners manifested as signs of faded attention: 1 time, a learner looked in the windows, and another time, a learner touched other classmates. Ten minutes into the discussion, 28% of the total unnecessary movements/ behaviors the learners manifested as signs of faded attention, two times of the learners talked to their seatmates, another two times of the learners looked in the windows, one time a learner tapped their hands in the table, one time a learner walked around the classroom, and one time a learner touched their classmates. Fifteen minutes into lesson discussion, 28% of the total unnecessary movements/ behaviors the learners manifested as signs of faded attention: 2 times of the learners tapped their hands at the table, two times the learners looked in the windows, another two times the learners touched their classmates, one time a learner talked to their seatmates, one time a learner walked around the classroom, one time a learner made joke. Twenty minutes into lesson discussion, 36% of the total unnecessary movements/ behaviors the learners manifested as signs of faded attention, two times of the learners talked to their seatmates, two times of the learners shouted, one time a learner tapped their hands on the table, one time a learner played with random things, one time a learner walked around the classroom, one time a learner looked at the windows, one time a learner made joke.

Table 8. Unnecessary movements/ behaviors of Grade 2 Jack and Jill learners during the implementation of BBS.

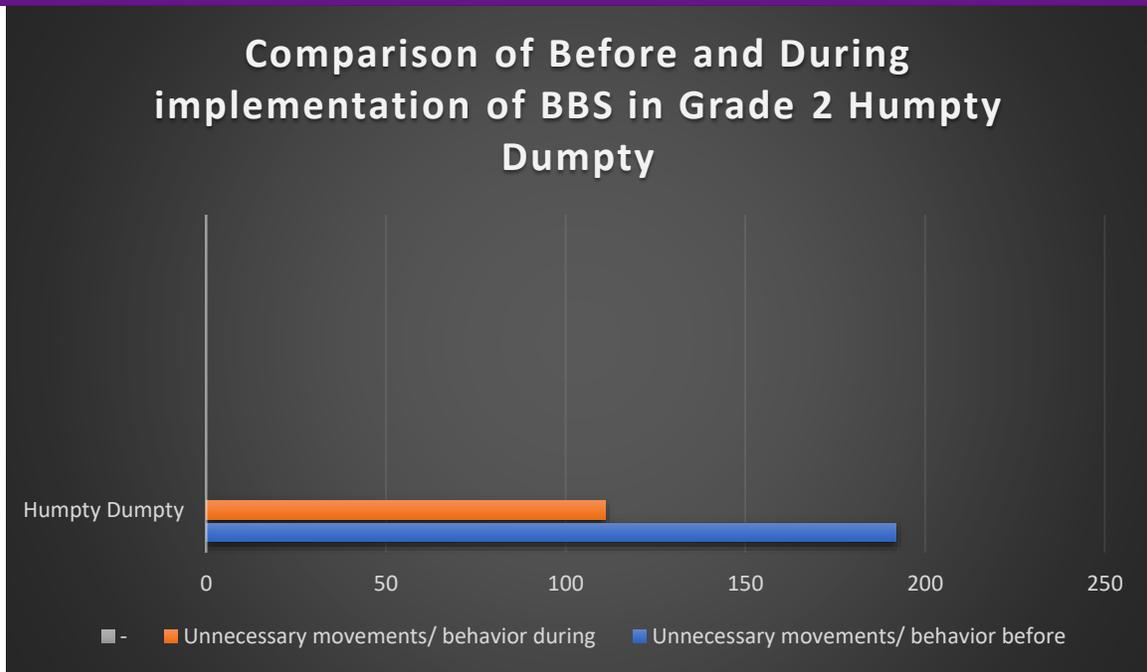
Week 2 Observation ( Day 2)				
Attention Span	5 mins	10 mins	15 mins	20 mins

1. Tapping of hands in the table	0	0	1	2
2. Talking to seatmates.	0	1	1	3
3. Playing with random things.	0	0	1	0
4. Walking around the classroom.	0	1	1	4
5. Looking in the windows.	0	0	0	0
6. Making jokes.	0	0	1	4
7. Sleeping	0	0	0	0
8. Shouting	0	0	2	5
9. Touching other classmates.	2	1	3	2
Total	2	3	10	20
<b>Total unnecessary movements and behaviors: 35</b>				
<b>Percentage</b>	<b>5.7%</b>	<b>8.6%</b>	<b>28.6%</b>	<b>57.1%</b>

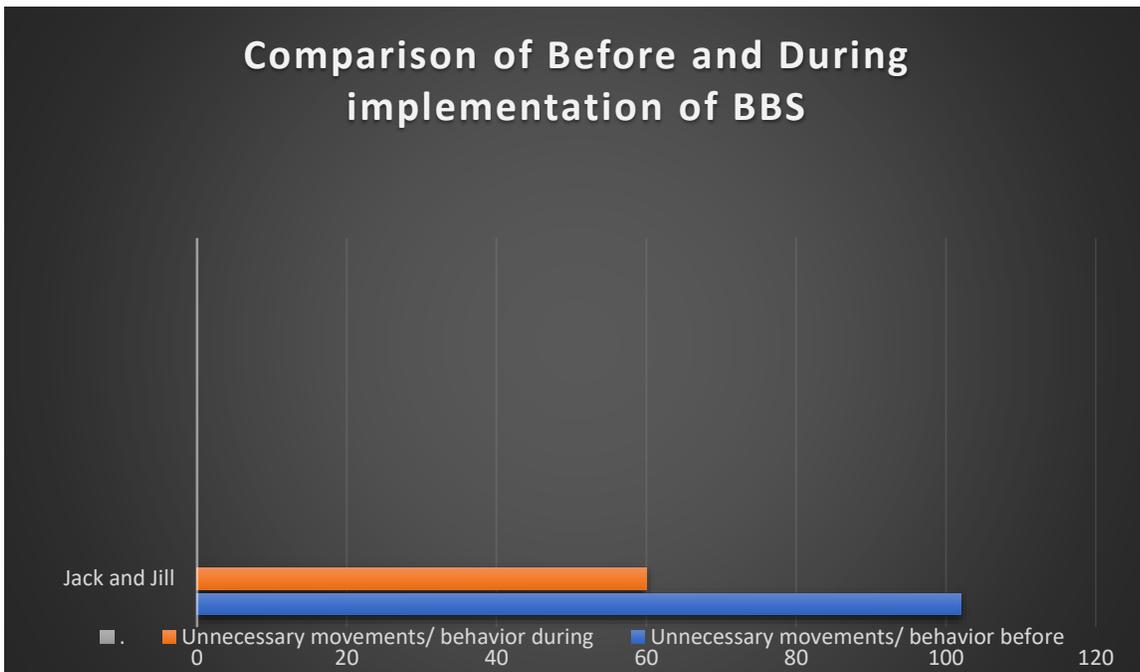
Discussion in Week 2 Observation (Day 2) During the implementation of BBS in Grade 2, Jack and Jill, the learners showed 35 unnecessary movements and behaviors as a manifestation of faded attention during class discussions. Five minutes into the lesson discussion, 5.7% of the total unnecessary movements/ behaviors the learners manifested as signs of faded attention; two times, some learners touched their classmates. Ten minutes into the lesson discussion, 8.6% of the total unnecessary movements/ behaviors the learners manifested as signs of faded attention: 1 time, a learner talked to their seatmates; one time, a learner walked around the classroom; and another one time, a learner touched their classmates. Fifteen minutes into lesson discussion, 28.6% of the total unnecessary movements/ behaviors the learners manifested as signs of faded attention, three times of which some of the learners touched their classmates, two times some of the learners shouted, one time a learner talked to their seatmates, one time a learner tapped their hands on their tables, one time a learner played with randoms things, one time a learner walked around the classroom, and another one time a learner made jokes.

Twenty minutes into the lesson discussion, 57.1% of the total unnecessary movements/ behaviors the learners manifested as signs of faded attention, five times when some of the learners shouted and four times when some walked around the classroom. Another four times, some of the learners made jokes. Three times, some of the learners talked to their seatmates; 2 times, some of the learners tapped their hands on their tables; another two times, some of the learners touched their classmates.

*Bar Graph 1: Comparison of Unnecessary Movements / Behavior by The Learners of Grade 2 Section Humpty Dumpty Before and During The Implementation of BBS.*



Bar Graph 2: Comparison of Unnecessary Movements / Behavior by The Learners of Grade 2 Section Jack and Jill Before and During The Implementation of BBS.



This bar graph shows the difference between the outcome before and during the implementation of BBS. The bar shows the unnecessary movements/ behaviors of the Grade 2 learners in sections Humpty Dumpty and Jack and Jill. The blue bar represents the total unnecessary movements/ behavior before implementing BBS. Meanwhile, the orange bar represents the total unnecessary movements/ behavior during implementing BBS. In the Grade 2 section Humpty Dumpty, before the implementation of BBS, the total of unnecessary movements/behaviors during the observation was 192. During the implementation, the total number of unnecessary movements/behaviors was down to 111. On the other hand, in Grade 2, Jack and Jill, before implementing BBS, the total number of unnecessary movements/behaviors during

observation was 102. During the implementation of BBS, the total score of unnecessary movements/behaviors was down to 60.

Based on the tables of data presented above, with the results in hand, from before and during the implementation of the Brain Break Strategy (BBS), it has been found that the use of BBS during lesson discussions can enhance the level of participation of Grade 2 Humpty Dumpty and Jack and Jill learners.

The findings show that on week 1 (Days 1 & 2) in both sections, the learners can easily be distracted, and the longer the lesson discussion, the lesser their attention span without using BBS. Meanwhile, on week 2 (Day 1 & 2), with the implementation of BBS during the transition of each part of the lesson, there was a significant change in the learners' attention span, focus, and concentration. According to Mahar et al. (2006), incorporating brief periods of physical activity breaks has greatly enhanced attention span and academic performance.

The remark was corroborated by a study by Norris et al. (2016), which found that mindfulness-based brain breaks positively impact attentional concentration and can improve cognitive function. In addition, Jensen et al. (2014) asserted in their study that short cognitive breaks considerably positively impact attention span. In addition, a meta-analysis conducted by Vanzou et al. (2019) discovered that including brief physical activity breaks can benefit attention span and academic performance. Implementing Brain Break Strategies in classroom settings, particularly during course discussions, can significantly enhance learners' focus, concentration, and overall engagement. The establishment of comprehension and a solid base of information and teachings in primary school play a crucial role in promoting knowledge that can be applied in various contexts. The National Research Council (2012) highlights the significance of early education in establishing the foundation for continuous learning throughout one's life.

Furthermore, according to Alexander (2008), the primary purpose of the early years is to promote profound learning and conceptual comprehension. The primary purpose of elementary education is to provide a solid basis for future academic success and cognitive development.

To deliver the essential knowledge to the learners it requires attention to focus and concentration to the lesson discussion. With the help of Brain Break Strategy here are the following conclusions:

1. Prior to the implementation of BBS, the longer the lesson discussion is the lesser the attention span of the learners of Grade 2 Humpty Dumpty and Jack and Jill.
  - 1.1 The accumulated times of unnecessary movements/ behavior of the learners before the implementation of BBS garnered a total of 294 from Week 1, Days 1 – 2 both sections Humpty Dumpty and Jack & Jill.
2. The accumulated times of unnecessary movements/ behavior of the learners during the implementation of BBS garnered a total of 171 from Week 2, Days 1 – 2 both sections Humpty Dumpty and Jack & Jill
3. There is a significant difference on the attention span of the learners based from the garnered total scores before and during the implementation of Brain Break Strategy.

## **Recommendations**

The research shows that the Brain Break Strategy helps enhance the attention span of Grade 2 Humpty Dumpty and Jack and Jill learners. Based on the data presented above, the attention span of the learners before and during the implementation of BBS increased. Attention in class helps the young learners understand more of the lesson the teacher discusses. Those learners who are full of energy can release it during the breaks given by the teacher to provide more concentration and focus on the lesson. The following are recommended based on the results and implications of the study:

1. The researchers recommend the Brain-Based Strategy to teachers who need help making their learners focus on the lesson discussions.
2. This strategy is recommended to educators because it is very helpful, especially if there are only a few learners who really focus during class lessons.
3. The researchers recommend this strategy during class lessons as it increases participation in the class when the young learners are focused.

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