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## Perspectives on Movement in the Classroom and Strategies that Keep Students Engaged

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# Perspectives on Movement in the Classroom and Strategies that Keep Students Engaged

By Darley Desormo

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Under the Mentorship of Professor Lynn Roberts and Dr. Meca Williams-Johnson

## ABSTRACT

Within this study, the question of “what are teachers’ rationale for incorporating kinesthetic learning in the elementary classroom ” will be addressed. The purpose of this study is to gain insight from elementary teachers’ perceptions and their rationale on the use of movement-based learning in the classroom. To examine further into this research, interviews were conducted. Participants of the study were elementary classroom teachers. During seven online meetings, the researcher interviewed using consistent guiding questions asking elementary teachers about their implementation and rationale of movement-based learning in their classroom experiences. The researcher also asked questions to gain an understanding of how teachers define kinesthetic learning. After the study was completed, the researcher found similarities and differences between the teachers’ perceptions on the topic of kinesthetic learning. The elementary teachers gave a variety of meanings when asked for their definition of kinesthetic learning. On the other hand, even though different teaching experiences exist there was a strong connection on the barriers to incorporating kinesthetic learning in the classroom. Overall, incorporating kinesthetics into the classroom involves more than adding it as a strategy to help strengthen students’ learning. This study can be used for both teachers and non-teachers to get an understanding of the rationale behind the use of kinesthetic learning in the classroom. The findings will be helpful to educators who are making decisions about using kinesthetic learning within their practice.

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## **Introduction**

In elementary schools across the United States, changes to scheduling priorities have resulted in reduced amounts of time allotted for physical activity. Two decades ago, Congress passed an initiative intended to increase accountability in schools; however, an unintended consequence, negatively affected physical education (Stapp & Karr, 2018). The No Child Left Behind Act of 2001 reduced the importance of non-core academics, such as music, art and physical education. This act also increased focus on subjects that produce measurable results (Centers for Disease Control and Prevention [CDC], 2020). As a result of this new focus, time was more rigorously structured for subjects such as math and language, which detracted from physical education.

An actionable response from educators was to find creative ways to include more physical and nontraditional methods to have in the classroom. Previous studies by researchers such as Booth et al. (2013), Calvert et al. (2019), and Faught et al. (2017), support increasing amounts of classroom physical activity. Results from the studies show that students taking breaks from academics for physical activity is effective for improving classroom behavior which aligns with recommendations from health officials at the Physical Activity Guidelines (PAG) for Americans (Coto et al., 2019). PAG stated that children need a minimum of 60 minutes of daily physical activity. In the classroom, physical activity can be seen in kinesthetic learning practices. Kinesthetic learning in this research is defined as student involvement in the classroom that allows students to carry out physical activities or manipulation of objects through touch to process new information. The Center for Disease Control stated that physical activity of this sort improves attention and academic performance for children (CDC, 2020). Also according to researcher John Ratey (Ratey, 2008), exercise improves three levels of learning. This includes first, optimizing our mindsets to “improve alertness, attention, and motivation.” Second, encouraging nerve cells to combine in light of “logging in new information.” And lastly, our stem cells develop into nerve cells contributing to internal transfer of information so we can communicate with others (p.53).

Recent trends have shown the reductions in physical education programs. Due to the increased pressure for high test results, teachers have taken the initiative (Webster et al., 2017) to incorporate kinesthetic learning activities in their classrooms. This study examined the role of physical activity within elementary classrooms. I explored feedback from elementary teachers about the use or non use of kinesthetic learning practices in their classroom. The participating

elementary teachers were interviewed to gain their insight and perspective on how including or not including kinesthetics impacts the classroom environment and students.

### **Purpose statement**

The purpose of this study is to understand the perceptions and rationale from elementary teachers on their use or nonuse of kinesthetic learning in the classroom. Asking elementary teachers if they are implementing kinesthetic practices in their classroom, along with their reasons for doing such are ways teachers were interviewed. Kinesthetic learning is viewed to be beneficial to all learners no matter the preferred learning style. The aim of this study was to examine what elementary teachers may deem as a challenge or success with addressing kinesthetic learning practices in the classroom.

### **Research Question**

1. In the elementary classroom, what are teachers' rationale for incorporating or not incorporating kinesthetic learning in the classroom?

### **Review of Literature**

Kinesthetic learning has the intention to strengthen students physically, emotionally and academically. Through an active learning environment, students are more willing to cooperate because of the fun instruction leading to less misbehaviors. (Flippin, 2021).

Marcus Van (2012) investigates how physically active learning can revitalize the classroom. Looking into the effects of test centered instruction versus student centered instruction can uncover how students perform best (Van, Marcus., 2012). Since the introduction of The No Child Left Behind (NCLB) act of 2001, non-core academics such as physical education have significantly reduced, allowing more time for academic progress and district and

state testing. Marcus Van (2012) mentioned that movement in the classroom can combat tension for teachers' instruction and the students' learning. Marcus mentions practices that can be recycled for teachers to utilize over and over again (Marcus, 2012, p. 33). Examples include using brain breaks, active lesson activities, exercise and also fitness. Teachers can involve movement in their classroom without adding to the common stress factors they worry about such as the worry of adding to their planning time and being hard to implement in instruction.

Making the connection between the mind and the body is how the strategy of kinesthetic learning is fostered in the classroom. In the book *Spark* by John J. Ratey unfolds the reason why our movement has an effect on how we internally feel and how our brain operates. Ratey (2008) mentions that “the real reason we feel so good when we get our blood pumping is that it makes the brain function at its best” (Ratey 2008, p. 3). Within our society the mind and the body are treated as separate entities. Reconnecting the two can have a positive effect on mood, anxiety and attention. When looking into studies from the California Department of Education (CDE), Ratey found “that students with higher fitness scores also have higher test scores. [And] in 2001, fit kids scored twice as well on academic tests as their unfit peers.” (p.21) The CDE conducted the same study in 2002 (after the NCLB act was passed) and still found the same results. Research indicated that “physical activity has a positive influence on memory, concentration, and classroom behavior” (p.22).

Michelle Flippin (2021) researched the effectiveness of using kinesthetic equipment. This consisted of exercise balls and standing desks rather than typical seating arrangements. This study was to see if this physical change in the classroom would affect the outcome of on task behavior. In the results of this study it was found that when the kinesthetic equipment was used there was an increase in on tasks behaviors. When the equipment was taken away, there was a

decrease in on task behaviors. This strategy of implementing more movement in the classroom can be beneficial to teachers who are interested in incorporating physical activity in the classroom. It was seen that including these seating arrangements does not take away from instructional time or planning time. Educators will be able to place this equipment in their classroom and receive less off task behaviors than before. The results show that “during the baseline week, students were on task for 60% of the time. And in the intervention phase, students were on task for 75% of the time” (Flippin, 2021, p. 8). When only looking at the equipment use, it was seen to be 89% of on task behaviors. With each phase of intervention there was an increased percentage of on task behaviors than each time before.

If teachers see adding this equipment in the classroom as a safety issue, they can provide precautions of the equipment use, use with older children, or use it as a reward system. If used as a classroom behavior reward system, it is important to have other physically active strategies in place so that activity in the classroom is not new to students. Moving should be a common practice amongst the children. Since the decline in emphasis on physical activity in public schools, the stigma of physical activity for children could be seen as a reward or punishment. It is important for teachers to see it as a requirement not only for a better classroom environment but for better students and their health.

Many can find physical activity daunting including both children and teachers. The strategy of dance and music can combat this and be enjoyed by those who are either being first introduced to physically active lessons or those who struggle with other strategies and want to try something new. Vagner Besera (2021) takes into account how physical activity can be helpful to add into education classrooms, but might not be practical due to time restraints. Her solution to this is to purposefully incorporate active learning into daily lessons and one way to do this is by

dance. She states that “synchronizing the mind and body leads to improved motor skills, coordination, memory, reading, speech, language and mathematical skills” (Besera, 2021, p. 2) This positive experience is included to be more of incentive for teachers to see the relations to why this is beneficial to use in their classrooms.

In Besera’s (2021) study, it was seen through training that teachers who participated in academic lessons using dance found it very valuable and different from previous training done before. Incorporating these types of lessons into pre-teacher training can offer a welcoming approach to actually using dancing as a teaching method in the classroom. It is important to look into how comfortable elementary teachers are with using strategies such as this one in the classroom.

Purposely incorporating dance into lessons can remove stress from teachers when teaching because they will be having fun as well. If teachers don’t see how they can incorporate dance into their lessons, they may also just use dance as a brain break strategy. Álvaro Infantes-Paniagua highlights that active breaks are still an important topic to discuss when talking about schools. In Paniagua’s study, active breaks were seen to improve cognitive abilities but had no significant effect on student concentration. When a teacher is not comfortable with using active learning activities or has never done it before, using active breaks in the classroom can be another great starting point. Although great for getting students to move, this study does not recommend using this strategy to improve the concentration of students. Due to there being neither a negative or positive relationship between active breaks and student concentration, there are no promises to regain the focus of your students after doing this strategy. In other words, it may just be beneficial to adding to the 60 minutes of physical activity, getting out the wiggles, or used as an active formative assessment for improvement of cognitive abilities.



A way to ensure that multiple teachers are using physically active strategies in their classroom is to establish a system in the school. A resource that can be helpful is using the book “Early Elementary Children Moving and Learning: A Physical Education Curriculum” by Rae Pica (2014). This book provides parents and educators with many activities that can be used to get their students moving. These activities can be implemented into lessons to have students be more physically involved and moving while learning. Another resource that schools can supply for all their teachers is called “the walking classroom” (Weight, 2011). The Walking Classroom is a program used to have elementary students do physical activity without using instructional time. This is done through small devices and headsets bought by the school. Students are able to listen to an informative podcast while getting their steps in preferably outside or in a gym area. (Weight, 2011). This works well if a school allows for two recess periods for teachers. In the study conducted when this strategy was used, there was seen to be an increase in performance and mood. Students' attitudes about being active will likely improve and this technique doesn't take teachers away from their instructional time.

Many strategies and techniques have developed to work towards a healthier next generation - but there is still more to do. As mentioned before, because of the No Child Left Behind Act, classes like Physical Education have been shown less attention. There are many strategies available that may not be seen as effective to inservice teachers because of time restraints and testing requirements. There is a concern for losing instructional and planning time if an educator wants to incorporate physical activity into their curriculum. Without knowing how to do it successfully, educators may shy away from incorporating an appropriate amount of movement into their classroom all together.

This research is needed to form findings on how kinesthetic techniques can serve as a benefit for teachers as they implement it in their instruction. Kinesthetic learning is beneficial to many learners. It can be looked at as a hassle because of time restrictions, but finding resources and support can encourage teachers to use these movement strategies for a variety of their students. Taking the previous research to form a base for my own practice will allow for background knowledge when studying the beliefs of how inservice teachers feel about kinesthetic learning practices. Previous research has established many students are capable of learning when they move around within their physical environment rather than sit at a desk. I seek to find out how teachers are prompting movement and learning within the classroom during our intense struggles with standardized testing and reductions of extracurricular activities.

## **Methodology**

### *Qualitative Research*

For my research collection, I collected data by using qualitative methods. As I conducted individual interviews with teachers, I recorded their responses as collected data. The line of questioning explored the teacher's thoughts and insight to the involvement of kinesthetic learning in the classroom. These interviews also looked into how teacher's define kinesthetic learning and how movement is involved with the quality of student education.

With the use of this design and methodological approach of qualitative data collection, I was able to explore commonalities and differences between the teachers' perspectives and experiences surrounding their amount of involvement with movement in the classroom.

### *Participants and Site*

When addressing the meaning of kinesthetic learning, it is important to gain the perspectives of teachers' in lower grade levels. Kinesthetic learning is largely focused in lower grade areas, therefore, the study leans towards interviewing elementary teachers as they are more likely to experience a connection with using this type of learning style. To collect insight, interviews were with elementary school teachers in the district of Chatham County located in Savannah, Georgia. In fall of 2022, focusing on elementary teachers' feelings and experiences about movement in the classroom was intended to lead towards a better understanding of the use and nonuse of movement in the classroom. The school selected includes a low socioeconomic status of students as well as a high population of children that have English as a second language. All teachers interviewed were from the same school but expressed their own personal experiences that they've seen throughout their whole teaching career.

### Procedures

To gain permission to interview teachers at the chosen school, there first needed to be contact with the principal. After written permission was obtained from the principal and assistant principal of the elementary school, I was able to email the schoolwide academic coach. This person then emailed all elementary teachers which brought in subjects on a voluntary basis. No teacher was turned down. Emailing me back with their interest to find out more information on my research, I received eight participants. Seven out of eight participants were interviewed. The only criteria of teachers were that they needed to be teaching elementary school aged children. As such, any type of experience of teaching with children was accepted. Collection of the data took place virtually during hours that work best for them. From personal observation, all interviews happened before the start of the school day or during a lunch break. The participants were asked multiple opinion based questions (see Table 1: Questions). These questions were

intended to receive insight on elementary teacher’s rationale toward kinesthetic learning practices being used during class time. Due to the interviews being held virtually, I made sure to record the sessions for future review and reference. For all but one interview, I started the session by asking the teacher to tell me about themselves outside of the classroom. I then asked them about the amount of time, locations and subject areas they have taught in. After gauging the amount of experience participants had in the classroom, we then spent time discussing their definition of kinesthetics. Bell stated that it’s “the ability to move your body.” Daisy described it as “any kind of physical something that uses both the body and the mind...at the same time.”

In order to get the best research from my interviews, I realized that I should ask teachers to tell me about their personal life and passions. This can also give insight to their perceptions and involvement with kinesthetic learning in the classroom. Just as it was mentioned in Besera’s study, teachers who participated in training to show how movement can be incorporated into lessons found it valuable (Beserra 2021). Therefore having more experience with the strategy of kinesthetic learning could have an effect on whether it’s used in multiple spaces. I began to question what the participants in my study were passionate about in their personal life because it could have an influence on how often they use kinesthetic learning strategies if they are involved in movement in their own lives.

Questions Asked:	How many Answered:
1. In the elementary classroom, what is your rationale for incorporating or not incorporating kinesthetic learning in the classroom (Main Question) a. How do you define kinesthetic learning?	7
2. How often do you incorporate kinesthetic learning practices in the classroom? What is your reasoning for choosing this amount of time?	7

3. What factors help you incorporate kinesthetic learning practices in the classroom? Explain further.	7
4. What factors hinder you from incorporating kinesthetic learning practices in the classroom? Explain further.	7
5. What are other learning practices you use in your elementary classroom that pair well with kinesthetics?	7
6. What consequences or challenges do you encounter when using kinesthetics?	7
7. What is the name of your school?	7
8. From your observation, is it clear to see if other teachers in your school either incorporate or don't incorporate kinesthetic learning practices. How? Explain further.	7
9. What do you teach? / Grade level?	7
10. Can you tell me about a time you noticed a difference in a student's development because of the kinesthetic practice used in the classroom?	7
11. Do you have any other comments in regards to kinesthetic learning in the classroom?	5
12. Tell me about yourself and what is important to you in your personal life. Including hobbies & passions.	6

Table 1: Questions

### Analyzing the Data

The interviews were conducted over the course of three weeks. Interviews were recorded and stored to a cloud for future review. These recordings were transcribed and printed with no ties to the participant names. The data was divided and labeled by numbers and pseudonyms. When analyzing each transcript, I highlighted direct feedback to the questions asked. After completing each individual transcript, I then started the process of organizing similar themes across the interviewed teachers. For example, when participants discussed the same challenges,

these themes were grouped together in a different set of notes. There was then a search for if subjects had the same explanations for their answers.

This research primarily focused on the teacher's rationale for incorporating or not incorporating kinesthetic learning into their classroom. Although all teacher's feedback was valuable, my main focus was finding recurring themes to ensure that the data collected was a valid representation for the generality of elementary teachers I interviewed.

### **Findings**

In this study, through reaching out to the principal of a local elementary school I was granted permission to interview elementary teachers about their experiences in regards to the use or non use of kinesthetic learning strategies. The purpose of these research methods was to discover teachers' rationale behind incorporating or not incorporating movement within the elementary classroom. During all of the seven interviews, I asked teachers about their personal passions, general teaching experiences, their definition of kinesthetic learning, how they use movement strategies and how they don't use it. Due to me treating these interviews like a conversation, I recorded these interviews to have for future reference. After all interviews were conducted, I transcribed all recordings and gave them pseudonyms so participants were not tied to their personal identity (see Table 2: Participants). Within these transcripts, I highlighted common trends in what multiple teachers were saying. I also noted comments that were outliers but I felt added value to my study.

Pseudonym	Years of Teaching	Grades Taught	Specialities / Certifications	Passions/ Interests
Clover	6	3rd, 4th	Math & science	N/A
Bell	16	2nd, 3rd, 5th	Gifted & inclusion	Sports mom & shopping
Kerria	14	K-5th	Gifted teacher specialist	Baking & crafting
Gardenia	7	3rd & 4th	Gifted & inclusion	Traveling & Watching TV
Daisy	15	K-8th	English, social studies, gifted & academic coach	Yoga & Jewelry Making
Rose	21	K-5th	ESOL & media specialist	Traveling & reading
Jasmine	9	1st, 2nd, 4th	Gifted & inclusion	Coaching & writing

Table 2: Participants

Kinesthetic learning is a type of learning mostly seen as a strategy in the elementary school age range. As mentioned in the review of literature, having an active learning environment can lead to better student engagement due to more interaction taking place. Teachers in my study have expressed that when adding kinesthetic learning in their lessons, students do seem to be more engaged and willing to participate.

#### Definition of strategy

Although all teachers expressed that there was increased student involvement, teachers also had different definitions of what kinesthetic learning was. Four participants described kinesthetic learning to be tactile with the requirement to manipulate or touch materials. For example, Daisy stated that “physical aspects of learning [includes] using manipulatives with your hands... and [using] wiggly stools. [It is] any kind of physical something that engages both the body and the mind at the same time.” The other three participants defined kinesthetic learning to involve being an active participant. Gardenia stated that it's simply “doing some sort of bodily

movement” in the classroom such as using “a hand motion that helps [students] remember a vocabulary word.” Aside from these two definitions expressed by teachers, one participant also wanted to clarify that her definition of kinesthetics differed from her definition of kinesthetic learning. Rose mentioned that “when [we] put kinesthetics and learning together, that’s different than just kinesthetic movement in the classroom.” Describing that brain breaks are often used as an example of a kinesthetic learning strategy, she states that ‘brain breaks [is] just a kind of movement’ and does not involve a learning factor.

As this research study came together, my objective was to not only obtain teachers’ rationale on their utilization of kinesthetic learning strategies within their teaching experience, but I also wanted to gain insight into if standardized testing has affected the implementation of physical activity within the school day. Within both researched literature and the findings of my study it is seen that the definition of kinesthetics varies greatly so it can be difficult for it to be paired with the word ‘learning’. This causes teachers to have different perspectives of what kinesthetic learning strategies in the classroom consist of. This can contribute to their willingness or hindrance to implement these practices within their lessons. Throughout my study, I became more aware of how the definition of kinesthetic learning is more than a strict meaning of the two words merged together. Teachers define kinesthetic learning based on their experiences which contributes to their perceptions of incorporating it within their classroom.

### Use of strategy

Teachers expressed that the benefits to using kinesthetic learning practices in their classroom include an increase in student participation. Students take in a lot of information during the day, and the majority of the time is spent while being seated at a desk. Rose stated that everyone expects kids to “sit still for almost an hour at a time, and that’s just too much that they



can't do that.” Rose goes on to mention reasons why moving can help with this challenge. She thinks that “getting them up and moving [is a] reset [for] their brain.” Rose mentions that incorporating more human senses as a student learns allows them to build a stronger foundation of what is being taught. In relation to Rose’s thoughts, other teachers have expressed that the use of snacks (taste), songs (hearing), scavenger hunts (sight), and using objects (touch) can be examples of kinesthetic practices they use. In Clover’s interview, she said that scavenger hunts allowed students to “get up and move around the room and look for answers.” Another activity Clover has done allowed students to “take oreos... apart and use [a scrapping] tool to make different moon phases.” Having activities like such is enriching for students because it requires students to be hands-on and physically involved.

Other rewards of using movement in the classroom include students having an increased level of excitement and understanding of what is being learned. As Daisy was observing a class consistently throughout a month, she noticed that after the classroom teacher began to incorporate kinesthetic strategies throughout the school day, students were “much more willing to participate in what they were doing with the teacher” at small group discussions. Clover also noticed improvement in student enjoyment. Clover stated that when using kinesthetic strategies “the kids enjoy it more. They learn [and] it sticks with them more when they’re actually hands on. They’re doing. They’re involved in their learning.” Having immersive learning experiences can be very beneficial to students' understanding of a daunting topic. Jasmine says that in social study topics she really tries to get students engaged with the use of reenactments, and explorations. For example, Jasmine took her kids on an “expedition...for the kids to really understand what it’s like to walk from Missouri to California and back.” The use of these strategies can help students understand bigger concepts from the real world by making better

understanding of it within their personal classroom. When students are not enjoying learning, oftentimes this affects what the teacher's attitude towards the lesson becomes. Bell mentioned that if her students are "not having fun, [she is] for sure not having fun." Bell likes to move herself and also eat snacks, "so [she] lets them move and" eat snacks as well. It was seen by many of the participants that they find enjoyment from the enjoyment of their students. When participants talked about their experiences with kinesthetic learning strategies, the more experiences they shared with me, the more benefits they stated to why they use it.

### Non use of strategy

When participants were asked about why they refrain from kinesthetic learning in their classrooms all participants mentioned there being a lack of time. When asked to explain further, teachers mentioned struggles in time for planning, time for instruction, and time for assessment. Gardenia states that teachers "definitely don't get enough time to plan, and [with] the little bit of planning time [they] do get" she feels obligated to put it towards the basics that she "knows the kids have to learn." The fundamentals of learning come from state standards. These state standards are given to teachers as an outline of what their students need to know to be on the grade level of their education. To assess how well students are understanding material, they are consistently given tests. Because of this tangible system of evaluation, teachers expressed that assessing is a challenge. Jasmine mentions that if using kinesthetic strategies, assessing becomes "subjective." She talks about how she fills out a checklist when observing a student that verbally communicates their knowledge about a concept. But she always worries about what a parent is going to say or if they ask "how did you know that my child did or didn't know" the concepts? Because of this, she finds herself often using a worksheet that can be clearly seen if the right or wrong answer was chosen. As Jasmine included in her interview, she sometimes feels restricted

in the area of assessment because there is an expressed need of having “proof that the kids know it, or that they did it.” Having the necessity to acquire tangible evidence of knowledge does not allow for time to assess in more creative ways such as taking notes of student participation and observing their understanding during class projects/ discussions.

With the addition of time, teachers may also feel insecure about using this type of learning strategy if they don’t have much knowledge or experience with it. Kerria stated that because of being busy as an academic coach she “just tries to focus on the general curriculum.” Kerria explained that others primarily look to her for ideas and expressed that “there’s no one else to plan with, [it’s] just me.” More than half of participants indicated that if they had the chance to observe other classrooms, it would boost their confidence to use movement based learning with their own students. Participants have also mentioned that using kinesthetic strategies can bring on distractions for some students such as the new presence of supplies or seeing an abundance of bodily movement. Seeing how others teach, can allow for better adjustment to controlling possible misbehaviors as they come up when implementing this teaching strategy. Participants stated that although observations would be a wonderful opportunity for professional development and becoming better teachers of this strategy, there is no availability within their schedule to go into another classroom. With the highest expressed challenge being time, teachers explained their use of kinesthetic learning practices to be situational. Meaning that the use of kinesthetic learning strategies in their classroom is not something that is planned for neither a priority. The use of these practices are dependent on circumstances that come up along their teaching journey such as the content to teach and personalities in the classroom. Bell states that the use of this strategy “depends on the teacher’s preference.” Gardenia states that she uses movement in her classroom “in the spur of the moment

[along with being] necessitated by the students.” If students express the need for it, or if nothing else is working, some participants indicate that’s when they will refer to kinesthetic activities.

With the knowledge of different meanings of kinesthetic learning, the major finding of this study was the definitions by the teachers. From then, I was able to connect their implications and struggles of this learning strategy back to their expressed definition. The use of having open ended questions that asked about both sides of using and not using these strategies in the classroom gave participants the opportunity to fully express their thoughts and experiences . Oftentimes, when asking questions about a highlighted topic in education, answers are either right or wrong. But with the questions asked, they remained unbiased for the teacher to answer as truthfully as possible.

### **Discussion**

After identifying the participants' passions within their personal life and recognizing their teacher experience, I was able to see what teachers’ perceptions are towards the use of kinesthetic learning as a strategy in the classroom. When kinesthetic learning is compared to tactical usage of materials, benefits can include the use of manipulatives to help children physically visualize what teachers are explaining. With this definition, challenges may also include the lack of supplies or abuse of supplies given to children. If kinesthetic learning is defined through active bodily movement, benefits can include the use of music, dance and dramatics to help students with retention of material. Challenges may include the lack of space within the classroom or making transitions more difficult. It is found that kinesthetic strategies within the classroom have its benefits but it also is not implemented because of common

challenges teachers face. With time being an issue all participants mentioned, this is used as a key reason to why teachers are not using kinesthetic learning strategies as much as they would like.

Teachers having a lack of time is not surprising. Since 2001, teachers have been pressured to have academically high achieving students due to the legal changes brought from the NCLB act - now replaced by the Every Student Succeeds Act(ESSA). There is now a priority for using standards to teach students so they can perform well on state and national assessments. As mentioned before, Marcus Van (2012) talks about how teachers use movement based strategies to be of benefit to their student's engagement and health. When reviewing what my participants have said, the results of the study and the literature have comparisons in what is beneficial when using kinesthetics as a learning strategy in the classroom. What literature did not mention was the challenges that teachers can face when trying to incorporate movement within their lessons. Because past literature only focuses on success stories, my study is a start to discovering the 'why' beyond benefits of the strategy of movement within lessons. Instead, we begin to ask 'why' teachers use the strategies they use consistently and why they don't commonly use the strategies that they see as situational (such as the use of kinesthetic learning.)

### *Limitations of the study*

Observations were not included to view teachers' implementation of kinesthetic learning strategies within their classroom. Observing teachers using movement strategies over a period of time would have added more insights on action steps teachers use and if it actually has an outcome of keeping students engaged. Having the opportunity to see a teacher's experience would have been helpful to assessing their teaching style and personality and seeing if it has connections with if they implement movement or manipulatives within their lessons.

### Recommendations for further research

This study analyzed the comments of less than eight teachers from one elementary school. The small number of participants informed this study and therefore it is not able to be generalized to the whole population of elementary educators. Getting insight from more teachers within the school would be helpful. Getting insights from more teachers from other public schools will be more beneficial. Using the same line of questioning during interviews will be needed but investigating a different pool of teachers will add more credibility to a teacher centered conclusion.

Also the type of schools these elementary teachers teach in can have an effect on differing responses. Teachers who work at private schools have different teaching experiences than those who work at public schools. This leads to a difference in perceptions and rationale of incorporating creative learning strategies into their classroom such as kinesthetics practices. Exploring the differences between what private school and public school teachers say about their implementation of this strategy would be interesting. And it could perhaps show if public school policy is interfering or if there is a common challenge across the profession of teaching regardless of the type of school in which one teaches.

### **Conclusion**

Limited literature is available on how teachers can implement kinesthetic learning strategies in the classroom efficiently. My study aimed to fill the gap in research by questioning teachers who are expected to implement this approach. Elementary teachers were asked about their reason for incorporating or not incorporating kinesthetic practices in the classroom. I was delighted to see some alignment between my literature and study in terms of what served as

benefits and challenges which awarded its credibility. Previous literature fails to mention how we have shifted to an academically pressured system with the use of standardized tests. There was no alignment of how elementary teachers could be successful using movement in learning without heightening the stress of achieving desired test scores. My researched literature mentions how teachers wouldn't have to worry about losing time in planning and instruction when implementing kinesthetic learning strategies. But with the addition of standardized tests, this was the most significant issue my participants brought up in their interviews.

Regardless of challenges expressed by the elementary teachers, my participants see the importance of incorporating kinesthetic learning in their classroom to help with student motivation and engagement. In completing my study, I realized that along with other strategies that may work well for teachers, time management is a prominent reason why it is not implemented. Kinesthetic learning is then left as a situational supplement instead of a principle strategy. While there are many strategies that can help with student motivation and engagement, the use of kinesthetic learning also contributes to the mental, emotional and physical health of our children. Caring about our students as a whole child is an important step to resisting the undeniable pressure to perform well on standardized tests. Adding kinesthetic movement in the classroom can also help with behavior management and the retention of information for many students. But for this to happen, we must support our teachers to not only feel more comfortable in implementing these strategies but giving them the time and tools to make kinesthetic learning more effective to use in their classrooms.

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