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Elementary students spend 7 to 8 hours in school for approximately 175 days of the year. Despite knowing that physical activity can aid in academic success and benefit the overall health of children, it is not widely used in schools outside of physical education and recess. The lack of physical activity (PA) in schools makes it more difficult for kids to achieve 60 minutes of PA. Teachers have to overcome several intrapersonal and environmental barriers to implement classroom-based physical activity (CBPA) successfully. It is not widely known how the influences of education, administrative support, and self-efficacy together play a role in the amount of CBPA a teacher uses. The purpose of this study was to investigate the relationship of educational background, administrator support, and teacher self-efficacy to a teacher's use of classroom-based physical activity. Elementary education teachers (*N*=44), grades K-5, were surveyed to gather data surrounding their use of CBPA. Results indicate that most teachers are using CBPA at least once per day, and some teachers are using it up to 8 times per day. Results also show an increase in education is related to an increase in the frequency in which a teacher uses CBPA. This group of teachers was confident in their ability to use CBPA. The more a teacher uses CBPA, the higher that teacher's confidence is in implementing the activities. This group also reported high levels of administrative support, with a majority of that support coming in the form of moral support and encouraging teachers to use different teaching strategies. This study may help to provide information to school administrators who can support teacher education efforts within schools and school districts. These findings provide data to support the creation of a school environment conducive to increasing the amount of movement used in elementary schools today.

THE IMPACT OF TEACHER EDUCATION, ADMINISTRATIVE SUPPORT, AND TEACHER SELF-EFFICACY ON USING MOVEMENT IN THE ELEMENTARY CLASSROOM

by

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CHAPTER I

PROJECT OVERVIEW

Schools have long been identified as areas where students are sedentary. Physical activity (PA), in both acute and chronic bouts, has shown to increase students' performance on academic achievement tests, executive functioning, processing speed, and memory (U.S. Department of Health and Human Services [U.S. DHHS], 2018), and there are several physiological benefits for children. However, several barriers such as time, space, school administration, and lack of teacher education have been identified which detract from a teachers ability to use movement within their teaching (Beemer et al., 2018; Cothran, Kulinna, & Garn, 2010; Dinkel, Schaffer, Snyder, & Lee, 2017; Martin & Murtagh, 2017; McMullen, Martin, Jones, & Murtagh, 2016; Parks, Solmon, & Lee, 2007). While barriers are numerable, several facilitators can also aid in a teacher's confidence as it relates to implementing classroom-based physical activity (CBPA).

CBPA generally comes in two forms—movement integration and activity breaks. Movement integration is a technique used to teach academic content and allow for physical activity simultaneously (Dinkel et al., 2017; Goh et al., 2013; Martin & Murtagh, 2017; Webster, Erwin, & Parks, 2013). Activity breaks are breaks in the academic content to allow the students to get up and move throughout the classroom to have a break from learning and from sitting. State teaching policies mention the necessity that teachers create an environment that promotes daily opportunities for fine and gross motor skill movement (NC State Board of Education [NC SBE], 2009). Education and experience are the top two facilitators of CBPA use, and teachers are more likely to use it if they have prior education and experience (Beemer et al., 2018; Goh, 2017; Parks et al., 2007; Webster, Erwin, & Parks, 2013; Webster et al., 2017). Confidence grows with

experience, and experienced teachers are more likely to use quick energizers and other quick forms of movement in the classroom if they have the knowledge and confidence to do so (Abi Nader, Hilberg, Schuna, John, & Gunter, 2019; Abramovitz, 2008). Teachers with stronger self-efficacy, or confidence, demonstrated more persistence in facing and overcoming the stated barriers in using CBPA (Abi Nader et al., 2019; Cantrell & Callaway, 2008).

Despite the evidence that CBPA benefits students in academics, health and wellness, and executive functioning, it is neither widely accepted nor used to its full potential (U.S. DHHS, 2018). Teachers and administrators should work together to create a comprehensive school physical activity plan, which includes daily CBPA, so more children are getting the recommended 60 minutes of physical activity each day.

Relevant Literature

Many factors have caused concern about the well-being of children, including an increase in rates of obesity and a decline in the volume and intensity of physical activity (Fedewa & Hoffman, 2013; Institute of Medicine [IOM], 2013). Children are active in nature, but society, the environment, and current lifestyles have created a sedentary atmosphere in a child's world. Being in school for so many hours a day, and being more sedentary at home, makes it harder for children to obtain the 60 minutes of recommended physical activity necessary to live a healthy life. This increased sedentary time and subsequent reduction in physical activity have led to an increased risk of cardiovascular and metabolic diseases not only for children but also across the lifespan as those children age (Hamilton, Healy, Dunstan, Zderic, & Owen, 2008).

Policymakers have recommended a Comprehensive School Physical Activity Plan (CSPAP) to increase physical activity in schools (Centers for Disease Control and Prevention [CDC], 2013; U.S. DHHS, 2018; White House Task Force on Childhood Obesity Report to the President, 2010). The five-part framework includes (a) PA before and after school, (b) physical

education, (c) PA during school, (d) staff engagement, and (e) family and community engagement (CDC, 2013). Classroom PA, the topic of this study, fits in two of the five sections of the CSPAP—physical activity during school and staff engagement. This includes the teachers proactively including any type of movement in the classroom. This can be incorporated into the curriculum, or it can remain separated from curricular content. Combining CSPAP components has previously demonstrated that children are three times more likely to meet the PA guidelines (Dobbins, Husson, DeCorby, & LaRocca, 2013).

School funding, employment decisions, and administrative policies can be based on high-stakes standardized testing (Segool, Carlson, and Goforth et al., 2013). In trying to achieve academic standards, the art of using movement in and out of the classroom to aid academic success and increase physical activity has been lost. Fewer than 3% of all elementary school children have daily physical education classes (U.S. DHHS, 2018), and only one in five elementary schools met the requirement of 150 minutes of physical education weekly in 2011 (Turner, Chaloupka, Slater, 2012). Further, only 10.7% of school districts require elementary schools to provide regular classroom physical activity breaks outside of recess and physical education (CDC, 2013, 2016.) While recess is widely used in elementary schools, children are only active at the moderate to vigorous intensity levels for approximately nine minutes or 30% of the time (IOM, 2013). Including physical activity throughout the school day, such as the CSPAP suggests, may lead to students obtaining their 60 minutes of physical activity.

Benefits of Physical Activity

According to the Physical Activity Guidelines Advisory Committee Scientific Report, PA is associated with a reduced risk of weight gain and adiposity in children ages 3-17, and it can improve bone health (U.S. DHHS, 2018; Powell, 2018). Physical activity improves sleep quality and can increase the amount of time in deep sleep in all ages (Powell, 2018). Anxiety and

depression are both reduced with regular PA (Powell, 2018; U.S. DHHS, 2018). Overall, from ages three and up, physical activity can improve daily physical functioning and enable people to go about daily life with energy and without undue fatigue (Powell, 2018). Just single episodes of PA can positively affect executive function. Immediate effects from single bouts of PA include reduced blood pressure, improved insulin sensitivity, improved sleep that day, a reduction in anxiety symptoms, and improved cognition that day (Powell, 2018). These improvements become greater with continued moderate to vigorous physical activity.

Multiple federal reports from the CDC and the U.S. DHHS support that PA in the classroom can improve academics, executive function, processing speed, and memory in the short- and long-term (CDC, 2010; Hill, 2011; Riley, Lubans, Morgan, & Young, 2015; U.S. DHHS, 2018). After bouts of physical activity, children have better concentration and on-task behavior (Maeda & Randall, 2003). It can be implemented as a standalone activity or be implemented into mathematics, language arts, reading, and science (CDC, 2010; Finn & McInnis, 2014; Fredericks, Kokot, & Krog, 2006; Reed, 2010). The CDC found no negative associations between classroom PA and academic performance (CDC, 2010). Most of the positive associations occurred on academic achievement test scores. Classroom behavior, attention and concentration, and visual skills also were positively associated with CBPA (CDC, 2010; Finn & McInnis, 2014). There was no evidence that allotting class time to physical activity produced a negative association with academic achievement or was detrimental to learning (CDC, 2010).

Policy

State teaching policies require that teachers create an environment that promotes daily opportunities for fine and gross motor movement (NC SBE, 2009). Teacher education programs should prepare pre-service teachers to meet minimum standards to teach. One such standard is that “elementary grades teacher candidates have the knowledge and understanding of mental,

emotional, physical, and social health to empower students to make healthy lifestyle choices." (NC SBE, 2009, p.13). North Carolina teaching standards state that to promote the benefits of a physically active life, teachers can adopt classroom practices that promote kinesthetic engagement. They can promote structured and unstructured recess. Lastly, they can integrate physical activity into classroom content. Upon graduation, teachers should be prepared to use play and active learning in their implementation of the curriculum.

Policies outside of those in teacher education programs can also increase the amount of PA within schools. An example of a statewide policy that is currently in place to increase the amount of PA in elementary schools is the South Carolina Student Health and Fitness Act of 2005 (South Carolina Department of Education [SC DE], 2005). This policy requires state-funded elementary schools to provide 60 minutes of specialist-led PA, such as physical education, and an additional 90 minutes of PA for students each week before, during, or after school programs, dance, fitness trail programs, intramural sports, biking or walking programs, recess, or activities that promote physical activity in the classroom (SC DE, 2005). Elementary classroom teachers are encouraged to promote part of this 90 minutes within the classroom in the form of Physical Activity Promotion in the Academic Classroom (PAPAC).

In 2018, 41% of the schools responded to the Students Health and Fitness Act Compliance Survey. Of those schools, 92% were meeting the guidelines of 150 minutes of physical activity per week (SC DE, 2018). This equates to 38% (270/702) reporting that they met the policy standards. The South Carolina Student Health and Fitness Act has led to an increase in classroom physical activity for teachers who are aware of the policy (Webster, Caputi, et al., 2013). Teachers who felt the school was supportive of the PAPAC policy also felt more innovative in their ability to be creative in the classroom to achieve the additional 90 minutes of PA. Within this study, the policy did influence teachers; however, it was concluded that the

school environment and intrapersonal variables were more influential. Teachers who found that this policy already fits within their teaching methods, philosophy, and skills felt more comfortable using CBPA, therefore, they used movement more often. Teachers also felt more comfortable using movement techniques when they felt the school was supportive of PAPAC. School support was identified as principal buy-in, school policies, sufficient classroom space, or provision of materials or resources for teacher use (Webster, Caputi, et al., 2013).

There is no need to wait around for statewide policies to be enacted as school boards can enact similar policies. While changes in policy surrounding school-based physical activity are complex, it can help to facilitate the use of physical activity in the classroom. Changes in policy aimed at the principles and procedures of school physical activity have the potential to shape the function and structure of PA within the school.

Institutional Facilitators and Barriers

Several factors can enhance or inhibit a teacher's use of CBPA. Before examining a teacher's self-efficacy or any intrapersonal factors, it is important to look at institutional factors that may support or hinder the teachers' use of movement. Institutional facilitators include administrative support and the availability of resources. Examples of institutional support include permission to use class time for PA, school board support, offerings of professional development, feedback and collaboration within the staff, offering schoolwide programming such as the Comprehensive School Physical Activity Plan (CSPAP), resources or other learning materials, and principal buy-in (Lau, Wandersman, & Pate, 2016; Michael et al., 2019; Webster, Erwin, & Parks, 2013; Webster et al., 2017). Administrators who are excited about including physical activity and are involved in the process, along with their teachers, see teachers using more movement in the classroom than those administrators who are uninvolved (Beemer, 2018). Supportive school environments lead to more adoption of CBPA (Webster, Caputi, et al., 2013).

Institutional barriers to including classroom-based physical activity are numerous and must be overcome by teachers. Time and space constraints, curricular demands and resultant assessment pressure, and the lack of supportive administrators all constitute institutional barriers (Dinkel, Lee, & Schaffer, 2016; Michael et al., 2019; Webster, Caputi, et al., 2013; Webster et al., 2017). Minimizing the barriers and increasing the facilitators can go a long way in making a teacher feel comfortable, including this teaching strategy regularly.

Intrapersonal Facilitators and Barriers

Several intrapersonal facilitators have been identified which include having confidence in one's ability to implement physical activity, understanding the value of it in one's personal life and for students, and the perception that it is easy to implement (Abi Nader et al., 2019; Bartholomew & Jowers, 2011; Cothran et al., 2010; Dinkel et al., 2017). Personal barriers to the implementation of CBPA include the teachers' own poor adoption of a healthy lifestyle, lack of education on the topic, low motivation, and lowered self-efficacy (Abi Nader et al., 2019; Bartholomew & Jowers, 2011; Cothran et al., 2010; Dinkel et al., 2016; Michael et al., 2019; Stylianou, Kulinna, & Naiman, 2016). Continuous professional development can increase the knowledge and skills teachers have in promoting classroom-based physical activity (Abi Nader et al., 2019; Stylianou et al., 2016).

Teacher beliefs, motivation, and confidence largely influence whether the teachers use movement. Efficacy is the belief that people can execute behaviors required to produce outcomes and accomplish goals (Bandura, 1977). Self-efficacy can be derived from four sources of influence; mastery experiences, vicarious experiences, social persuasion, and physiological arousal (Bandura, 1978). Previous studies show that teachers who had higher efficacy and those who perceived themselves as having higher competency levels in integrating physical activity more frequently used CBPA (Abi Nader et al., 2019; Parks et al., 2007; Webster, Russ, Vazou,

Goh, & Erwin, 2015). Teachers are more likely to implement a behavior with strong levels of efficacy beliefs toward that behavior, and they are more likely to overcome barriers and challenges in front of them (Cantrell & Callaway, 2008). Because of the dual role that administrative support, teacher education, and teacher self-efficacy have as facilitators and barriers, it is unknown how one's level of education coinciding with the level of administrative support at the school or district level and the teachers' self-efficacy affect the frequency with which the teacher uses classroom-based physical activity.

Previous research shows that teachers and administrators value the importance of PA for children and realize it could benefit the children in multiple ways; cognitively, mentally, and physically (Martin and Murtagh, 2015; Parks et al., 2007). Having teachers assume some responsibility in integrating PA into the classroom is one method to increase the amount of physical activity children attain daily. Teachers and administrators appear willing to include movement in the classroom but have reported they do not feel well-prepared to use it (Martin and Murtagh, 2017; Parks et al., 2007). Teachers who have used it reported using activities that the students enjoyed, those that were easy to use, included the least amount of classroom chaos, and which included academic content (McMullen, Kulinna, & Cothran, 2014). Providing support in the form of professional development can inform teachers on how to implement an active classroom effectively (Abi Nader et al., 2019). Active classrooms require buy-in, confidence, and facilitation from the teacher, yet most teachers do not have specific training to implement or integrate physical activity into their classrooms (Abi Nader et al., 2019; Parks et al., 2007).

Students in school self-report feeling more alert and focused after bouts of CBPA and that they are better able to concentrate on what is being taught (Finn & McInnis, 2014). Younger children are also more likely to enjoy movement in the classroom and are not influenced by peers' thoughts and reactions, making the use of movement more enjoyable and effective (Martin

& Murtagh, 2015, 2017). Ultimately, a change in policy and support from the school administration can increase the amount of PA that is attained by children during the school day. The increases in physical activity can have acute and lasting benefits on cognition, academic achievement, and in their physical health and well-being. Teachers and administrators must work together in this effort, and the current study is one step in showing both parties how they can harness each other's power and abilities to improve the classroom environment for the students.

Purpose Statement

The purpose of this study was to investigate the relationship of educational background, administrator support, and teacher self-efficacy to a teacher's use of CBPA. The specific aims of this study were:

Aim #1: Determine the relationship between the frequency of CBPA use and the teachers' education in CBPA.

Aim #2: Determine the relationship between the frequency of CBPA and teacher self-efficacy.

Aim #3: Explore the role of administrator support in a teacher's use of CBPA.

Methods

To address the specific aims of this study, elementary teachers were invited to complete an online survey related to their use of movement in the classroom, their education in CBPA, their self-efficacy using CBPA, and their support network at their current place of employment.

Participants

Elementary education teachers (K-5th grade) were the primary target of this study. This population was chosen because it is easier to implement movement in the elementary and kindergarten classrooms due to the length of time teachers spend with the same students each day. Twenty-seven schools were recruited to obtain permission to use their teachers. Fifteen principals

agreed to allow the survey to be sent to their teachers, three schools declined participation, and nine schools did not respond to several requests for permission. There were 12 schools from the southeastern area of the United States (10 public and two private) and three schools from the Midwest (three private) whose principals agreed to allow their teachers to be recruited. Overall, 225 people were invited to take this survey.

Forty-four out of 48 surveys were used for analysis. Four were eliminated for substantial missing data. All participants were female. The races represented were 88.4% Caucasian (*n*=38), 11.6% African American (*n*=5), and one person declined to answer. The grade levels represented were 14.0% kindergarten teachers (*n*=6), 25.6% first-grade teachers (*n*=11), 14.0% second-grade teachers (*n*=6), 19.6% third-grade teachers (*n*=8), 18.6% fourth-grade teachers (*n*=8), and 9.3% fifth-grade teachers (*n*=4). One person did not report what grade they taught.

This sample included 70.5% public school teachers (*n*=31) and 29.5% private school teachers (*n*=13). Within this sample, 47.7% had 10 or fewer years of teaching experience (*n*=21), 38.6% had between 11-20 years of teaching experience (*n*=17), and 13.6% had more than 20 years of teaching experience (*n*=6). Sixty-eight percent of the teachers in this sample had only their bachelor's degree (*n*=30), and 31.8% had a master's degree (*n*=14).

Instrumentation

Survey. The survey used was adapted through the combination of three previous surveys analyzing teachers on their knowledge and capacity to implement CBPA, teachers' collective-efficacy in using movement, and the effect of teacher training on the use of CBPA (Abramovitz, 2008; Dinkel et al., 2016; Parks et al., 2007). After including the questions which would benefit the purpose of the current study and deleting those that would not, college professors, and current elementary teachers, edited the survey and provided input and suggestions. In October 2018 a pilot study was conducted. Through the pilot study, it was determined that a broad definition of

the term physical activity which encompassed movement integration and physical activity should be used. Additional questions regarding the administration and peer influences were added after the pilot study to have a greater focus in this area. Several questions were deemed unnecessary for my specific objectives and were removed to decrease the time required for participants. After each revision, the survey was examined by a peer editor or a faculty member from the dissertation committee. The final product was a 40 question survey (Appendix A). Attached to the survey was an information sheet (Appendix B), and the first question served as informed consent. This survey was used to address both the purpose and aims of this project. It intended to identify elementary teachers' use of CBPA, their self-efficacy in using movement, and the environmental role specifically of the administrators on the teachers' use of movement.

Procedures

Approval was obtained from the Internal Review Board at the University of North Carolina at Greensboro (UNCG), the school district, private schools, and all of the principals of the schools involved to complete this study. The 40-question physical activity survey was emailed out to all K-5th grade teachers at each participating school at the beginning of the 2019-2020 school year. Reminder emails followed two weeks and again after four weeks from the initial request. Another private school was added in October with permission from the school principal and the Institutional Review Board to yield a higher number of participants. The survey remained open through the end of October 2019.

Analysis

After the data collection period, all survey responses were downloaded into SPSS Version 26 from Qualtrics for analysis using descriptive and inferential statistics. Descriptive statistics and frequencies were calculated for all measures: frequency of use, education, self-efficacy, and support.

Education

An ANOVA was used to determine the relationship of CBPA use and the amount of education a teacher had at the undergraduate and graduate level combined. Due to the small population of the study, the education variable was then split into two groups, those who reportedly had $\leq$10 hours in total education and those who had > 10 hours of education. A one-way ANOVA was conducted between the frequency of movement and the two different education levels (>10 hours completed, $\leq$ 10 hours completed).

An independent samples *t*-test was used to compare those with greater than 10 years of teaching experience and those with less than 10 years teaching experience on the frequency of CBPA use.

Self-efficacy

The self-efficacy score used was a combination of scores for confidence in using movement integration and confidence in using activity breaks. Self-efficacy was also split into two groups—a moderately confident group and an extremely confident group. No participants reported being less than moderately confident. A *t*-test was conducted to compare the two self-efficacy groups on frequency of CBPA.

Support

Due to the lack of variability among support responses, descriptive analyses (frequencies) were used to analyze the variable of support. Qualitative survey responses (n=29) to the question "How do you feel supported by your administration?" were also used to analyze this information. Thematic analysis (Creswell, 2014) was used to categorize responses into the following six categories, 1. Encouragement, 2. Policy, 3. Support, 4. Professional Development, 5. Giving Suggestions, 6. Other.

Results

All teachers in this study were using some form of movement in the classroom, with 93% of teachers (*n*=39) using movement once or more per day. Figure 1 represents the frequency with which the teachers in this study use CBPA.

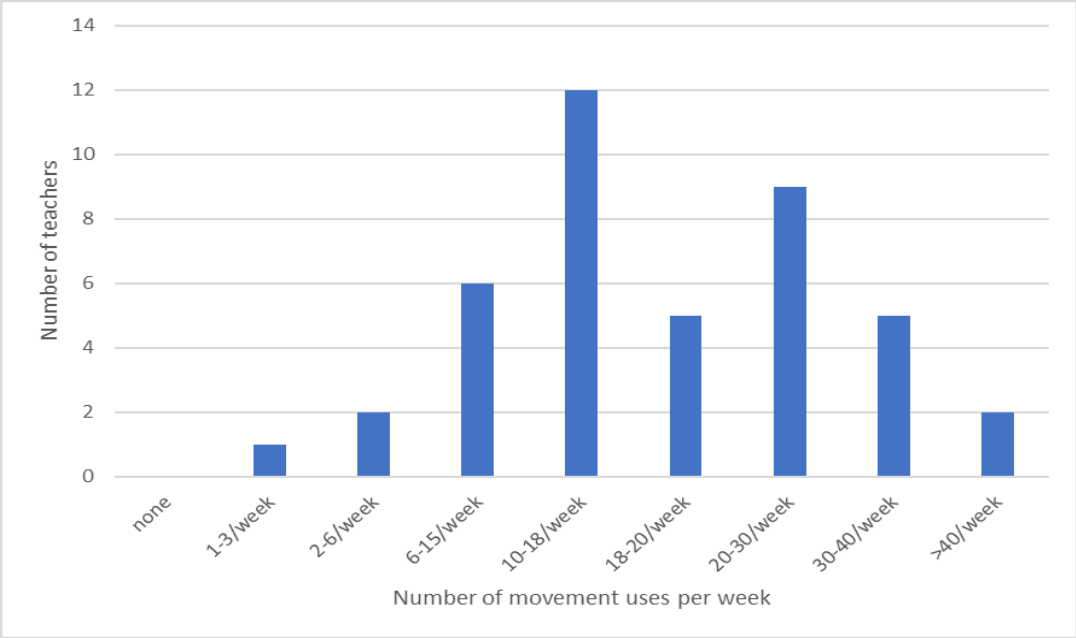

Figure 1. Frequency of Movement Activities Teachers Used Per Week.

Frequency and Education

It was hypothesized that more teacher education in using CBPA would result in a teacher using it more frequently than those with fewer hours of education. Education in this study was calculated based on undergraduate and graduate coursework time combined. Educational data was also split into those with fewer than 10 hours and those with more than 10 hours of education. An ANOVA was carried out to determine if teacher education was related to increases in the frequency with which a teacher used CBPA. The test showed significance for teacher education at the undergraduate and graduate levels combined $F(1,40) = 6.64$, $p=.014$. A one-way

ANOVA showed a significant difference ($F(1,38) = 2.92$, $p=.046$) in the amount of CBPA used between teachers with greater than 10 hours of training ($M=7.92$, $SD=1.38$) and those with fewer than 10 hours of training ($M=6.33$, $SD=1.58$). Teachers who had 10 or fewer hours of training used movement approximately 10-18 times per week in their classes, and those with greater than 10 hours of training used movement approximately 20-30 times per week.

Frequency and Years of Experience

Teachers self-reported their years of experience in four categories as shown in Table 1. An independent t-test comparing those with 10 or fewer years of teaching experience ($n=21$) and those with more than 10 years of teaching experience ($n=23$) revealed a significant difference on the frequency with which they use movement in the classroom $t(40)=-2.05$, $p<.05$. Teachers with 10 or fewer years of teaching experience ($M=6.25$, $SD=1.62$) used approximately 15 activities per week. Teachers with greater than 10 years of experience ($M=7.27$, $SD=1.61$) used approximately 20 activities per week. Those teachers with more teaching experience were using one more movement activity per day than those with less than 10 years of teaching experience.

Table 1

Comparison of Years of Teaching Experience and Frequency of Classroom-based Physical Activity Use

Years of experience	*n*	*M*	*SD*
0-5	8	6.50	1.41
6-10	12	6.08	1.78
11-15	6	6.33	1.03
16-20	10	7.60	1.71
21+	6	7.67	1.75

Self-efficacy and Education

Teacher self-efficacy, or confidence levels, were high in this study, with 52.4% of teachers (*n*=22) being moderately confident, and 47.6% (*n*=20) being extremely confident in their ability to use CBPA. On a 10-point scale, no teachers scored less than a 5, or moderately confident.

Self-efficacy and Frequency

A Spearman correlation was conducted on the relationship between self-efficacy and frequency. Results showed a significant relationship between teacher confidence and CBPA use (*r*=.44, *p*=.003).

Table 2

Comparison of Level of Self-Efficacy and Frequency of Classroom-based Physical Activity Use

Self-Efficacy	*n*	*M*	*SD*
5 (moderately confident)	3	5.67	.58
6	11	5.73	1.56
7	8	6.63	1.19
8	13	7.69	1.55
9	1	7.00	0
10 (extremely confident)	6	7.50	1.68

Support

Ninety-seven percent of the respondents (*n*=40) felt supported by their administrators in their ability to use movement in the classroom as needed. Only one person reported not feeling supported by the administration. Teachers felt supported in the categories of moral support (*M*=2.24, *SD*=.49) and encouraging of new or different teaching strategies (*M*=2.12, *SD*=.6) as it related to movement activities within the classroom. Teachers reported not feeling supported in flexible scheduling (*M*=1.68, *SD*= .61) and receiving financial support (*M*=1.65, *SD*=0.7).

In responses to the question, “How do you feel supported by your administration?,” 29 people responded positively and only one gave a negative response. There were 10 responses that fit into the category of encouragement and 10 that fit into the category of support. Both are passive types of support. Seven fit into the categories of policies in place, suggestions that are made by administrators, and professional development opportunities or funding. These are considered active types of support. Within this study, most teachers felt support through passive means such as through moral support or encouragement by the principal and not through active or tangible means such as financing professional development or implementing policies. Some ways teachers felt supported in this manner by their administrators were as follows: “She (the principal) encourages us to use it (PA) at least 15 minutes a day,” “They (the administration) do not discourage me from doing it,” and “They (the administration) allow me to make choices within my own classroom on how to deliver content and manage student behavior.” One teacher noted that their administration “note[s] it as a positive on observations.” Areas in which teachers did not feel as supported were financial support and having flexible scheduling. Within this study, two teachers mentioned that the administration provides professional development or funds professional development, while another teacher said, “We are a global health and wellness school. Although we have not had PD (professional development) to strengthen our abilities to integrate this theme in our classroom, it is encouraged to do on our own.”

Discussion

The purpose of this study was to determine how the intrapersonal and environmental variables of administrative support, confidence, and education relate to teachers’ use of classroom-based physical activity. The purpose of the first aim was to examine the relationship between the frequency of classroom-based physical activity and the level of education the teacher had and the level of support from their administrator. Findings between the frequency of

classroom-based physical activity and teacher education were significant. As teacher education or training increased, so did the amount of CBPA. This is consistent with findings from other studies (Abi Nader, 2019; Parks et al., 2007; Webster, Erwin, & Parks, 2013; Webster et al., 2017). Further investigation revealed that teachers with more years of experience are using higher rates of CBPA. Teachers may be learning as they go or learning how to perform CBPA from peers or administrators with whom they work. Because education has been shown to increase physical activity use, schools could consider including teacher education programs and teacher professional development sessions within faculty workdays. Pre-service teacher education programs can also administer teachings on classroom-based physical activity, which can lead to more use for in-service teachers (Parks et al., 2007). As many of the participants in the study were from North Carolina, it is important to note that North Carolina teachers, upon graduation, are already expected to be able to address the growth and development of the whole child and implement a curriculum to address physical development through CBPA or kinesthetic engagement within the classroom. They are also expected to create and design classroom space and schedule opportunities for physical development each day (NC SBE, 2009). With education being a significant influencer of CBPA use, policies that include CBPA as a standard in pre-service teacher programs may be enacted to implement more education on CBPA. This can help teachers become more prepared to implement it when they graduate (IOM, 2013; Parks et al., 2007; Webster, Erwin, & Parks, 2013; Webster et al., 2017).

The current study showed a difference in CBPA use between those with greater than 10 hours of education on the topic and those having less than 10 hours of education. This is very little time in the grand scheme of a four year college program, which can be the difference between 10 CBPA uses per week or 40. This limited amount of time can also increase the confidence level of the pre-service teacher, which also showed to be a positive factor in CBPA

use for in-service teachers (Parks et al., 2007). The current study did not determine what types of education or training were most or least impactful, nor the amount of time spent within each training session. This was a collective view of total self-reported education on the topic of classroom physical activity.

The purpose of Aim 2 was to examine the relationship between the teachers' self-efficacy and CBPA. There was a significant relationship between confidence and frequency of CBPA use. This relationship is important in that as teachers build confidence in their ability to use CBPA, they feel more comfortable doing it and can implement more of this type of activity during the school day. As teachers can implement more CBPA, their confidence levels also can increase. This finding is consistent with that of Dinkel et al. (2017), which showed that having confidence in oneself led to more incorporation of movement in the classroom. Parks and colleagues (2007) also found that mastery experiences were the strongest predictor of efficacy when it came to integrating physical activity into the classroom. It is also important to note that teachers with greater confidence are better able to overcome other barriers to CBPA use presented to them during the day (Cantrell & Callaway, 2008).

Administrative support was measured for Aim 3 and the results showed that this population felt supported by their administrators. Teachers felt they received moral support from administrators and that they were supported in using new or different teaching strategies. Most of the support mentioned by the teachers was passive support, such as encouraging words. There were very few comments about active or tangible types of support, such as policies driving physical activity within schools and offering professional development. Administrative support is only one environmental aspect that may affect a teacher's CBPA use; however, it can influence several other environmental barriers within the school. While it is important to have support from the administration, this support alone is not enough to suggest a teacher will use CBPA.

Physical education teachers must also play a role in promoting physical activity not only in PE class but also at recess and in the classrooms (Webster and Nesbitt, 2017) . Typically, the physical educator is one of the only people trained in PA at the school, and they often acquire the title of School Health Coordinator or Wellness Coordinator. They could take on the responsibility of helping teachers modify their classrooms and initiate the movement for classroom-based physical activity in the schools (Webster and Nesbitt, 2017). They can also lead virtual or live-stream exercise routines for all classrooms to participate in daily (Webster and Nesbitt, 2017).

Limitations of this study include the small sample size (*N*=44). Teachers attending graduate school did not show a significant increase in the use of CBPA over those not attending graduate school. This could be related to the low number of participants who attended graduate school or what content their graduate degree covered. With a larger population, there may have been a significant relationship between having a graduate degree and using more CBPA.

All of the information in this study is self-reported by the teacher. While it is positive to see that so many of the participants felt supported by their principals, it must be viewed with caution. The principals were able to select their teachers to be in or out of the study by giving or not giving permission to use their school, respectively. This step was necessary for this study due to school board policy and IRB restrictions. Potentially, principals who are not supportive of using movement in the classroom simply said no to the study request or ignored it. If teachers had been able to select to participate independently, there could have been a larger number of people who did not view their administrators as supportive. This would have allowed for other comparisons to be made with the variable of support.

Several areas for future research have developed during the course of this study. Future studies may ask teachers about types of professional development courses that are preferred for learning this content. Investigation is also necessary to determine whether this content is better

learned in one 10 hour day of professional development or a series of 10 one hour classes. In future programming, it is not likely that schools will dedicate one or two whole days to classroom-based physical activity programming, but administrators and teachers alike may set up one hour meetings bi-monthly to accomplish 10 hours of training on the topic throughout the school year.

A more holistic view from teachers about their administrators' support as well as the perception from the administration are areas to explore. They could focus more on the administrators and their role within their school related to CBPA use. Potentially, an observational study could be conducted to see how administrators are interacting with faculty in relation to CBPA. Future research can also focus on cost-effective education for pre-service and in-service teachers through school- or district-wide faculty development programs.

Conclusion

This study and previous studies have identified that an increase in training or professional development can lead to an increase in a teacher using CBPA. It is still unclear what type of training is best, but this study showed that greater than 10 hours of education on the topic was significant enough to make a difference in the amount of CBPA used. Because self-efficacy and frequency were strongly related, we can communicate to teachers that starting to use CBPA in any capacity will help them feel more comfortable with it, even without having specific training during their undergraduate or graduate education. Support is also important from the administrators, but it is unclear in what capacity or form that support should include.

CHAPTER II

DISSEMINATION

This dissemination plan will be emailed in the form of a document with hyperlinks (Appendix C) to various pages of information aobut the study and resources and a PDF to the principals who agreed to have their teachers participate in the study. Teachers who provided their email for the raffle will also be sent a copy of the dissemination document. The principals will be asked to share the document with their elementary school teachers, including specialty teachers such as those in physical education, art, music, and foreign languages. It is important that all teachers in elementary schools know the importance of movement in the classroom and that it can occur in any classroom on any topic. The document is set up similar to a lesson plan, which should be easily recognizable to both the principals and elementary teachers. The sections included are:

Engage: This page explores the recommendations physical activity for children 3-17. Physical, cognitive, and academic benefits from physical activity are also noted.

Explore: This page shows the results of the study in an understandable format. Results are split between information pertaining to teachers and information pertaining to administrators.

Explain: This page explains and discusses the importance of the results and what the results mean for administrators and teachers.

Apply: This page provides resources for teachers and administrators to learn about and get ideas for classroom-based physical activities. There are a variety or resources in both English and Spanish.

Reflect: This page includes an open forum for teachers to post how they use classroom-based physical activity. Teachers using the Google platform will be able to edit the document and respond to other teachers.

The purpose of this hyperlinked document is to provide a free educational resource to help elementary school teachers and principals to gain more knowledge in implementing classroom-based physical activity. The study showed that just 10 hours of education could lead to a greater increase in the use of CBPA. This educational resource can be a part of that 10 hours. By looking at resources on the resources page and communicating with other teachers on open forum, teachers may also gain confidence which is also associated with an increase in CBPA.

The provided information can also help the administrators understand that they are an important piece and that their support of teachers using CBPA is necessary to allow teachers to feel comfortable using it in the classroom. It may also help them to understand that support can come in many forms, and it does not have to be an extra cost to the school. Moral support and encouragement may be just as helpful as a costly professional development course.

Each section includes a link that navigates the user to a new page with specific information. Information is presented in a format such that both administrators and teachers alike can find use in it. The hyperdoc is currently available at the website https://docs.google.com/document/d/11MbWnelqJq2zgZDBQi_Yjbxv2o886B9qQEswtx9JP3g/edit?usp=sharing and is provided in Figure 2.

CLASSROOM BASED PHYSICAL ACTIVITY

Survey results and resources

Engage

"MOVE IT! MOVE IT! MOVE IT"

Is this your classroom motto?

Ask yourself ***why*** or ***why not***?

Click the link below to get information on the benefits of classroom based physical activity (benefits of PA)

Explore

Today's Lesson:

Dig in to the results to see how classroom based physical activity is linked to teacher education, self-efficacy, and administrator support.

For ***Results*** go to (Results)

Explain

Class lesson:

So what is ***important*** to remember?

Take away points here

Figure 2. Dissemination Hyperdocument.

CHAPTER III

ACTION PLAN

This dissertation provides further evidence that education and confidence can increase teachers' classroom-based physical activity use. Teachers can benefit from knowing this information; thus, it is important to get the information into their hands inexpensively and effectively. The dissemination plan provides a free resource to the principals and teachers to use to understand the results of the study and how that can play a role in their own classrooms. It also includes free resources and an open forum for communication.

Further, presentations to local school boards and at regional events such as those presented by the North Carolina Alliance for Athletics, Health, Physical Education, Recreation, Dance and Sport Management and the North Carolina Association of Elementary Educators can help get the information into the correct hands in an inexpensive manner.

In the future, I plan to continue using this data set to look at barriers these teachers face in the wake of using classroom-based physical activity. Barriers prohibit many teachers from using movement, and there are too many to address at once. Identifying barriers that exist for a majority of teachers can further help to identify remedies to those barriers. This study examined the education level of the teacher and the support from administrators; two widely cited barriers. However, several other barriers were mentioned in the study that warrant further investigation.

While this study used general support as a whole, it was also broken down in the survey into several different components. In the future, I would like to investigate the different types of administrative support; moral, curricular, financial, flexibility in scheduling, professional development opportunities, and encouraging the use of a variety of teaching strategies. Some can

be free or very inexpensive for schools and administrators to implement if the administrators are aware that it can make a difference.

Lastly, I would like to work with elementary teachers on classroom modifications that can easily be made to improve the working environment and the ability of teachers to implement more physical activity during the school day. Modifications can be using stations around the room to clear space in the middle, having an active space with stationary exercise equipment, having a "bored basket" with physical activity cards, and modifying lesson plans to include more movement to coincide with learning.

The ultimate goal of the dissemination and action plans is to increase classroom-based physical activity for all elementary children. This can be achieved through principal support, inexpensive education, and modification of classrooms and lesson plans. It is important to get kids up and to move during the school day to help with concentration, learning, and overall health.

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APPENDIX A

SURVEY INSTRUMENT

Elementary Teacher Survey on Classroom Physical Activity

This survey will ask about your use of classroom movement activities. Completion of this study is completely voluntary. Your participation will help to guide future education, research in this area, and advocacy for movement in the elementary classroom. When you are finished you will be redirected to a separate document to submit your name and email address to be entered into a drawing for a $25 Amazon e-gift card. Four gift cards will be awarded. Below is an attached information sheet with further details about this survey.

Information sheet

I have read the information sheet and by choosing "yes" I consent to taking this survey.

- ○ yes
- ○ no

This information is for demographic purposes only and will be aggregated. Personal and school information will not be identified.

1. What is your sex?

- ○ Male
- ○ Female
- ○ Other _____

2. Please specify your ethnicity.

- ○ White or Caucasian
- ○ Hispanic or Latino
- ○ Black or African American
- ○ Native American or American Indian
- ○ Asian/Pacific Islander
- ○ Other _____

3. Highest degree obtained

- ○ Bachelors
- ○ Masters
- ○ Doctorate

4. Total number of years teaching

- ○ 0-5
- ○ 6-10
- ○ 11-15
- ○ 16-20
- ○ 21 +

5. Current grade level

- ○ Kindergarten
- ○ 1st
- ○ 2nd
- ○ 3rd
- ○ 4th
- ○ 5th

6. Do you teach at a public school or private school?

- ○ public school
- ○ private school

The questions in this section ask about your professional development and experience using physical activity or movement within the classroom. **Movement** can be defined as any activity that results in a child moving parts of their body or their whole body. **Movement integration** is integrating movement into the lesson plans where movement is used to help teach the content. **Activity breaks** include Energizers or Brain Breaks and are usually breaks in the lesson followed by a movement activity which does not necessarily include lesson content.

1. How often do you currently use the activities listed below in your classroom?

	never	1-3 times per week	once per day	2-3 times per day	more than 3 times per day
movement integration	○	○	○	○	○
activity breaks	○	○	○	○	○
other movement activities	○	○	○	○	○

2. What amount of education in the use of classroom physical activity did you have during your teacher education program?

○ None- No education in the use of classroom physical activity during my teacher education program

○ I have had 1-10 hours classroom physical activity education during my teacher education program

○ I have had more than 10 hours of classroom physical activity education during my teacher education program

3. What amount of post-graduate education do you have in the use of classroom physical activity?

○ None- No post-graduate education on using physical activity in the classroom

○ I have had 1-10 professional development contact hours of instruction in using classroom physical activity post-graduation (such as workshops or other professional development opportunities)

○ I have had more than 10 professional development contact hours of instruction in using classroom physical activity post-graduation

4. Among the following areas, what types of post-professional education have you engaged in?

	none at all	reading/ research on my own or with a coworker	single workshop or conference session	multiple classes/ programs
movement integration	☐	☐	☐	☐
activity breaks	☐	☐	☐	☐
other movement activities	☐	☐	☐	☐

5. Are there other ways in which you educate yourself on how to incorporate movement into your classroom? _____

6. Was movement instruction included as part of your **new faculty training** program at your current place of employment?

- ○ yes
- ○ No

7. What, if anything, would facilitate your use of movement activities more often? Check all that apply.

- ☐ professional development
- ☐ administrative support
- ☐ bigger classroom
- ☐ smaller class size
- ☐ designated space
- ☐ resources/lesson plans readily available
- ☐ suggested by administration
- ☐ incentives
- ☐ other, please specify _____

8. How confident are you in your ability to

	Not at all confident	Not very confident	Somewhat Confident	Confident	Extremely confident
use movement integration in the classroom	○	○	○	○	○
use activity breaks in the classroom	○	○	○	○	○
use other forms of movement or physical activity in the classroom	○	○	○	○	○

9. How confident are you in your ability to

	Not at all confident	Not very confident	Somewhat confident	Confident	Extremely confident
Understand and meet the needs of kinesthetic learners?	○	○	○	○	○
Structure movement activities to fit your classroom needs?	○	○	○	○	○
Manage student behavior during movement lessons?	○	○	○	○	○
Use movement to convey curricular content?	○	○	○	○	○
Increase heart rate during movement activities?	○	○	○	○	○

This section determines how you use movement in the classroom.

1. How much planning time per day do you spend preparing for classroom movement activities?

- ○ none at all
- ○ 1-5 minutes
- ○ 6-10 minutes
- ○ 11-20 minutes
- ○ 21-30 minutes
- ○ other, please specify _____

2. During which of the following times do you use classroom movement activities? Check all that apply.

- ☐ At the start or end of the school day
- ☐ During circle time
- ☐ During line up or transitions
- ☐ During academic lessons
- ☐ In between academic lessons
- ☐ During periods of standardized testing
- ☐ Other, please specify _____

3. How long does a typical movement activity session last in your class?

- ○ 1-3 minutes
- ○ 3-5 minutes
- ○ 5-8 minutes
- ○ 8-10 minutes
- ○ other, please specify _____

4. How likely are you to include movement in each of the following subjects?

	not likely	somewhat likely	very likely
reading	○	○	○
mathematics	○	○	○
science	○	○	○
language arts	○	○	○
social studies	○	○	○
other, please specify	○	○	○

5. Which management strategies are you likely to use when classroom movement is implemented? Check all that apply.

- ☐ Using a stop or freeze signal
- ☐ Having the students stay in their chairs to move
- ☐ Having the students move in self-space
- ☐ Reorganizing the room to provide more space
- ☐ Having the students work with partners
- ☐ Having the students work in small groups
- ☐ Having the students follow the teacher
- ☐ Setting expectations and guidelines
- ☐ Using music to influence the energy level of the movement
- ☐ Using teacher voice to guide the movement
- ☐ Commenting on students work
- ☐ Using classroom rules
- ☐ other, please specify _____

6. Which management strategy do you use most often? _____

7. Below you will see a list of potential challenges or barriers which can affect your use of classroom movement. For each item determine how often you encounter this barrier in your classroom.

	Never	Rarely	Sometimes	Often	Very often
Attitude of the administration	○	○	○	○	○
Attitude of colleagues/peers	○	○	○	○	○
Attitude of parents	○	○	○	○	○
Attitude of the students	○	○	○	○	○
Not knowing what to do- lack of training	○	○	○	○	○
Concerns about class management	○	○	○	○	○
Limits of classroom time	○	○	○	○	○
Limits on classroom space	○	○	○	○	○
School focus on standardized testing	○	○	○	○	○
The scripted nature of some reading and math lesson adoptions	○	○	○	○	○
Length of time since being trained	○	○	○	○	○
Lack of data to support movement benefits	○	○	○	○	○
other, please specify	○	○	○	○	○

This section is designed to look at the environment surrounding your classroom. The environment consists of anything that may affect your ability to use movement in the classroom. Environmental considerations could be your class size, predominant gender in your class, languages other than English spoken, classroom space, number of students with IEPs, or peer, administration, and district influences.

1. Overall, how much does your current work environment play a role in your use of movement activities in the classroom?

- ○ Not at all
- ○ Somewhat
- ○ Very much

2. What aspects of your current work environment play a role in your use of movement activities in the classroom? Examples: classroom size, # of students, student age, peer support, admin support _____

3. How often do children in your class have recess?

- ○ Never
- ○ Some days
- ○ Every day

4. Would you use physical activity more often if the administration or school district encouraged its use in the classroom?

- ○ Yes
- ○ No

5. Does your current school administration (direct supervisors, principals, school district) support your use of movement activities?

- ○ Yes
- ○ No

6. How does the administration support your use of movement activities?

_____

7. How does the administration not support your use of movement activities?

_____

8. How supportive are other teachers of using movement in the classroom?

- ○ Not supportive
- ○ Supportive
- ○ Very supportive

9. How supportive is the school administration of movement activities in your classroom in each of the following ways?

	Not supportive	Supportive	Very supportive
Moral support	○	○	○
Curricular support	○	○	○
Financial support	○	○	○
Flexible scheduling	○	○	○
Professional development opportunities	○	○	○
Encouraging of new/different teaching strategies	○	○	○

10. How do your students respond to classroom movement activities? _____

11. Why do you use movement activities in the classroom? _____

12. What resources do you use to help you plan movement activities? _____

13. Do you have any other comments about using movement activities in the classroom?
_____

APPENDIX B

INFORMATION SHEET

IRB Information Sheet

Project Title: **The Impact of Teacher Training and Administrative Support on Teacher Self-Efficacy in Using Movement in the Elementary Classroom**

Principal Investigator: Melissa Goines

Faculty Advisor: Dr. Pamela Kocher-Brown

What is this all about?

I am asking you to participate in this research study to help inform our knowledge of how and why people use physical activity in their elementary classroom and to determine facilitators and barriers that impact a teacher's use of physical activity. This research project will only take about 15 minutes of your time and will involve you taking an online survey. Your participation in this research project is voluntary.

Will this negatively affect me?

No, other than the time you spend on this project there are no know or foreseeable risks involved with this study.

What do I get out of this research project?

There are no direct benefits to you for completing this research. The information gathered will be used to inform elementary education teachers and administrators on the influences that impact a teacher's use of physical activity in the classroom.

Will I get paid for participating?

You will not get paid for completing this study. You can choose to have your name and email address submitted for a drawing for one (1) of four (4) $25 Amazon gift cards. This is optional after completing the survey.

What about my confidentiality?

We will do everything possible to make sure that your information is kept confidential. All information obtained in this study is strictly confidential unless disclosure is required by law. The survey will only collect anonymous responses and your survey will be submitted before entering your name in the drawing should you choose to do so. Data will be stored on a password protected computer.

"**Absolute confidentiality of data provided through the Internet cannot be guaranteed due to the limited protections of Internet access. Please be sure to close your browser when finished so no one will be able to see what you have been doing.**"

You do not have to be part of this project. This project is voluntary and it is up to you to decide to participate in this research project. If you agree to participate at any time in this project you may stop participating without penalty.

What if I have questions?

You can contact the primary investigator Melissa Goines by emailing magoines@uncg.edu or Dr. Pamela Kocher-Brown the Faculty Advisor at plkocher@uncg.edu if you have questions about this study. If you have concerns about how you have been treated in this study call the Office of Research Integrity Director at 1-855-251-2351.

APPENDIX C

HYPERDOC FOR DISSEMINATION

CLASSROOM BASED PHYSICAL ACTIVITY

Survey results and resources

Engage

"MOVE IT! MOVE IT! MOVE IT"

Is this your classroom motto?

Ask yourself ***why*** or ***why not***?

Click the link below to get information on the benefits of classroom based physical activity (benefits of PA)

Class Notes

Recommendations and Benefits of Physical Activity for children ages 3-17

Recommendations

These recommendations are from the Physical Activity Guidelines 2nd Edition from the U.S. Department of Health and Human Services.

> Children should get 60 minutes of moderate to vigorous physical activity each day. It should be a combination of aerobic conditioning, muscle strengthening, and bone strengthening activities.

See below for the many benefits of increasing the level of physical activity in children.

Benefits

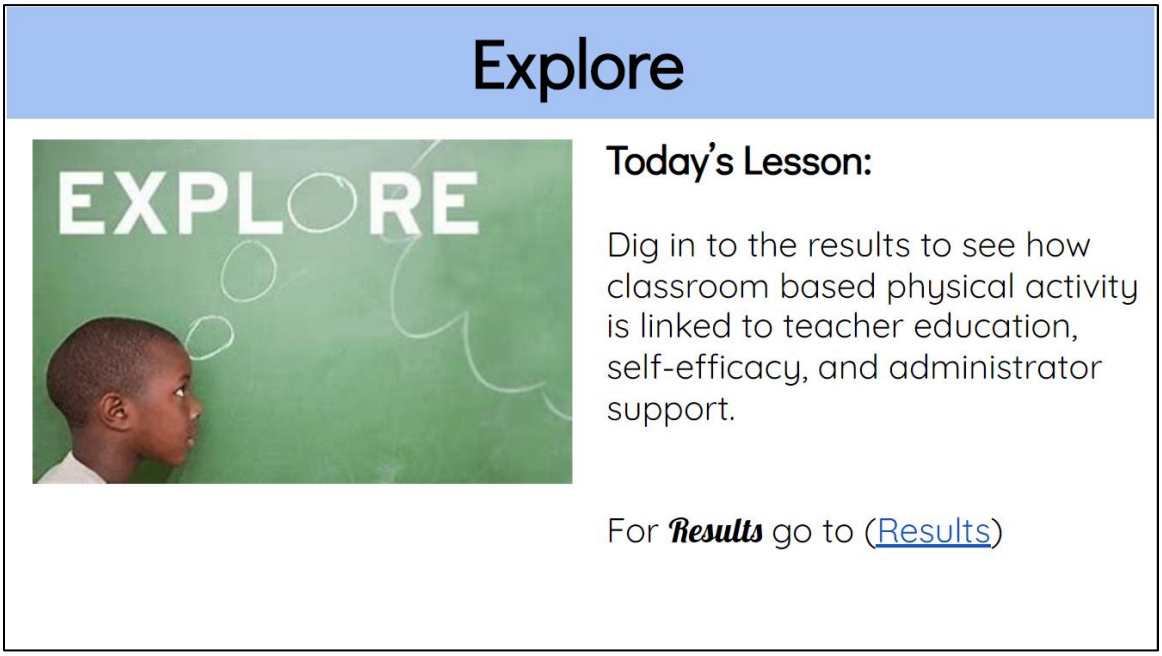
1. **Physical**
   - **a.** Improved physical function
   - **b.** Improved bone health and weight status
   - **c.** Improved cardiovascular and muscular fitness
   - **d.** Improved cardiometabolic health
   - **e.** Reduced risk of all-cause and disease specific mortality as one ages (delays death from all causes)
   - **f.** Improved quality of life
2. **Cognitive**
   - **a.** improved cognitive function ages 6-13 specifically
   - **b.** Reduced anxiety and depression risk, short and long term
   - **c.** Improved sleep
   - **d.** Improved executive function (ability to plan, organize, monitor, facilitate behaviors, initiate tasks, and control emotions)
   - **e.** Improved processing speed
   - **f.** Improved memory
   - **g.** Improved attention
   - **h.** Improved quality of life
3. **Academic**
   - **a.** Improvement on academic achievement tests in math, reading, and writing
   - **b.** Improved academic conduct
   - **c.** Improved grade point average
   - **d.** Improved on-task behavior

Not every study shows improvement in all areas but very few studies show negative outcomes by increasing the amount of physical activity.

References

U.S. Department of Health and Human Services. (2018). *Physical activity guidelines for Americans* (2nd ed.). Washington, DC: Author. Retrieved from https://health.gov/paguidelines/second-edition/pdf/Physical_Activity_Guidelines_2nd_edition.pdf

Centers for Disease Control and Prevention. (2010). *The association between school-based physical activity, including physical education, and academic performance.* U.S. Department of Health and Human Services. Retrieved from https://www.cdc.gov/healthyyouth/health_and_academics/pdf/pa-pe_paper.pdf



Class Notes

Survey Results

For administrators

Most of the teachers (97%) felt supported in this study which is fantastic. Support from administrators can go a long way in helping a teacher feel comfortable using movement in the classroom between activities or within the curriculum.

Teachers who are supported by their administration are more likely to use movement activities. Support can come in many different forms. Not all types of support will work in every situation, the best thing to remember is that any support at all is better than no support. Other types of support can be found under the section “EXPLAIN”.

Teachers in this study felt most supported in the categories of moral support and encouraging of different teaching techniques. The categories in which teachers felt least supported were in gaining financial support and having flexible scheduling.
Some of the feedback from teachers about how they are supported by their administrators is below.

- ‘The principal’ encourages us to use it at least 15 minutes a day
- They (the principal) do not discourage me from doing it
- ‘The principal’ encourages various strategies to keep students engaged
- They (the principal) note it as a positive on observations
- ‘The principal’ allows me to make choices within my own classroom on how to deliver content and manage student behavior
- They (the principal) require recess every day, extra recess on nice days
- ‘The principal’ provides training/funds for training
- ‘The principal’ provides suggestions on types of activities to incorporate

For Teachers

Teachers who had more hours of education on the topic of classroom based physical activity were more likely to use classroom based physical activity more often than those with fewer hours of education on the topic. Those with 10 hours of education or subsequent training (undergraduate education, graduate education, or professional development) were using more movement activities in their classrooms.

Confidence and frequency of classroom based physical activity use rise together. It is unclear from this specific study whether using more physical activity in the classroom causes ones’ confidence to rise or whether having high confidence first leads a teacher to use more physical activity in the classroom. Regardless, if you aren’t confident now, just start adding small daily activities. It is likely that your confidence will continue to increase as you move throughout the semester.

Explain

Class lesson:

So what is ***important*** to remember?

Take away points here

Class Notes

Take Away Points

Administrators

- Your support is necessary
  - Buy-in: that physical activity is helpful, not hurtful in the classroom
  - Provide sufficient classroom space if possible (flexible seating instead of desks is an idea)
  - Provision of resources and materials (websites included on the next page)
  - Faculty development opportunities provided on or off campus
  - Encouraging the use of different teaching techniques, allowing your teachers to be creative
- Support can give teachers confidence and motivation to include physical activity into their curriculum

Teachers

- Speak to your administrators about the topic of classroom based physical activity
- Educate yourselves on the topic. Just a few hours of education can build your confidence.
- Confidence correlates with using physical activity in the classroom more often.
- Start small and build in more activities as you learn and gain confidence.
- Speak with your peers regularly and share ideas.

Apply

Time to Practice!

- Find resources here for websites and videos to provide you with ideas to start implementing new classroom based physical activities today

Class Notes

Resources

Title	Content	Type of resource	Where to find it
GoNoodle	Movement activity videos with academic content	website	https://www.gonoodle.com/
Cosmic Kids Yoga	Yoga videos	Youtube	https://www.cosmickids.com/ https://www.youtube.com/user/CosmicKidsYoga
Whole Brain Teaching	Active learning	Website, books	https://wholebrainteaching.com/
Pinterest	Any content you desire	website	https://www.pinterest.com/
Silly Sports and Goofy games	Games and sports for kids	book	https://www.amazon.com/Silly-Sports-Goofy-Games-Grades/dp/1879097567

Title	Content	Type of resource	Where to find it
Teacherspayteachers.com	Lesson plans from other teachers	website	www.teacherspayteachers.com
Spanish movement games	Active games to help learn Spanish	blog	https://www.fluentu.com/blog/educator-spanish/spanish-classroom-games/
Spanish movement games	Active games to help learn Spanish	website	https://www.brighthubeducation.com/teaching-tips-foreign-languages/54324-kinestetic-activities-games/
Chop Chop Magazine	Healthy eating and exercise	website	https://www.chopchopfamily.org/
UNICEF kid power	Physical activity, helping others	website	www.unicefkidpower.org
National Physical Activity Plan	Guidelines and recommendations for physical activity	PDF See Table 3.1 for examples	https://health.gov/paguidelines/second-edition/pdf/Physical_Activity_Guidelines_2nd_edition.pdf

Reflect

What does this mean for your classroom?

How do children ***groove*** in your classroom?

By posting on the link below, others will be able to view how you successfully use classroom based physical activity.
Post your reflection here.

Class Notes

Reflection

Share below how you integrate movement into your classroom (others with the Google platform will be able to see and respond to your post)