



**Adapted Physical Education:  
Perspectives of Physical Education Teachers in New Hampshire**

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Graduate Education Programs  
Southern New Hampshire University

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## ABSTRACT

The purpose of this study was to learn about the obstacles and barriers of teaching Adapted Physical Education (APE) from the viewpoints of Physical Education (PE) teachers in rural New Hampshire public schools grades K-12. Two research issues drove this project: What challenges and barriers do Adapted Physical Education (APE) teachers experience when including students with disabilities in general physical education? and What are the experiences of rural New Hampshire Public Schools' Adapted Physical Education (APE) teachers to implement and adapt their classes for students with special needs? The study included interviews, observations, and the collection of artifacts and documents of Physical Education (PE) teachers in New Hampshire to investigate these concerns. Adapted Physical Education (APE) teachers encounter barriers and issues with inadequate equipment, class size, administrative support, physical space, funding, and a lack of professional development, according to the literature on Physical Education (PE). However, in New Hampshire, a limited amount of study has been done on Adapted Physical Education (APE), especially in rural public-school districts. Data was collected through triangulation using observations, document collection, and semi-structured interviews with Physical Education (PE) teachers in New Hampshire. Nearly all the Physical Education (PE) teachers in this study stated that they have adequate and sufficient administrative support; however, many of the PE teachers faced their biggest barriers and challenges when trying to work with students that have Social Emotional Learning (SEL) disabilities and behavioral issues. The research found that paraprofessional support is lacking, and, in some cases, it is completely non-existent in the PE classroom. Furthermore, several of the participants in this study cited "time" as a barrier, since they reportedly have limited opportunities to meet with students that have disabilities daily. Typically, only one class meeting per week. One participant in this study

stated that the entire sixth grade class/students do not receive Physical Education (PE) for the entire school year. Moreover, the study also showed that elementary and middle school students have limited opportunities and fewer options to take Physical Education (PE) classes compared to high school students. In addition, none of the participants in this study have earned their CAPE license and certification. Therefore, recommendations emerged that Physical Education (PE) teachers receive additional training and think about becoming a Certified Adapted Physical Educator (CAPE). The findings are examined, as well as the future of Adapted Physical Education in New Hampshire.



## DEDICATION

I owe my gratitude to my family for guiding me to, and through, this research. This dissertation would not have been possible without my wife, children, parents, and siblings. My wife, Rachel, who continued to support and push me in this endeavor. My children, Levi, Londyn, and Lainey, kept me moving forward, reminded me to never quit or give up, and were the source of my “why” motivation. I want to also thank my parents who encouraged, believed, and supported me even when I did not believe in myself. My father, Christopher “C.B.” and mother, Julie, for their continued moral support, patience, and love. To my siblings, Tamiya, Kyle, Angela, and Bradley for always challenging me, while encouraging me to be the best that I can possibly be.

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### LIST OF ABBREVIATIONS

<b>AAHPERD:</b>	American Alliance for Health, Physical Education, Recreation and Dance
<b>APE:</b>	Adapted Physical Education
<b>CAPE:</b>	Certified Adapted Physical Educator
<b>CDC:</b>	Centers for Disease Control
<b>GPE:</b>	General Physical Education
<b>IDEA:</b>	Individuals with Disabilities Education Act of 2004
<b>IDEIA:</b>	Individuals with Disabilities Education Improvement Act of 2008
<b>IEP:</b>	Individualized Education Program
<b>IRB:</b>	Institutional Review Board
<b>NASPE:</b>	National Association for Sport and Physical Education
<b>NCES:</b>	National Center for Education Statistics
<b>NCPEID:</b>	National Consortium for Physical Education for Individuals with Disabilities
<b>NEA:</b>	The National Education Association
<b>NHAHPERD:</b>	New Hampshire Association for Health, Physical Education, Recreation and Dance
<b>NHDOE:</b>	New Hampshire Department of Education
<b>PAE:</b>	Physical Activity and Exercise
<b>PETE:</b>	Physical Education Teacher Education
<b>SASS:</b>	Schools and Staffing Survey
<b>SAU:</b>	School Administrative Unit
<b>SHAPE:</b>	Society of Health and Physical Educators



## **Section One: Introduction to Dissertation**

### **Background**

In 1975, Congress passed Public Law 94-142, ensuring that all students with disabilities in the United States have access to a free and public education. In addition, the Individuals with Disabilities Education Act (IDEA) of 2004 covers all educational settings, including Physical Education (PE). In short, these laws stated that all children with disabilities must have whatever is necessary to meet their needs, whether it is special adapted Physical Education (PE) classes, “regular” PE classes, building access, necessary transportation, playing areas, gyms, ramps, equipment, and so on. While these laws appear well-intentioned on the surface, problems arose from the start. For example, no funding was provided for any of the mandates in the bill.

Moreover, according to the U.S. Department of Education’s Institute for Education Statistics, there are approximately 6.4 million students with disabilities between the ages of 3 and 21, accounting for roughly 13% of all students (2019). Not that long ago, Physical Education (PE) used to be centered on the idea of creating standard, uniform physical requirements for everyone, which went against the idea of each person’s individual development (Adyrkhaiev & Adyrkhaieva, 2017). Now, however, the fundamental purpose of Adapted Physical Education (APE) is to guarantee that each child receives Physical Education (PE) services that are tailored to his or her specific learning needs (Bruno, 2020). This notion of normalization, which became popular in the 1960’s, reflects this shift in perspective from a focus on rectifying disabilities to inclusion and value (Samalot-Rivera et al., 2017).

Inclusion, a movement in education aimed at increasing the engagement of students with disabilities in general education programs and supporting their needs, is a key problem in the United States (An & Meaney, 2015). However, while the concept of inclusion is becoming more

common, it is still controversial with parents, administrators, special education, and physical education teachers criticizing it (Byrnes, 2002). Furthermore, when it comes to the inclusion of children with disabilities, Physical Education (PE), like all other curriculum areas, continues to encounter new problems and opportunities (Kirk et al., 2006). Physical Education (PE) teachers that want to implement a worthy Adapted Physical Education (APE) program to students with disabilities can be hampered by any number of variables such as limited supplies and equipment (LaFee, 2007). Attitudes, low expectations, and teacher apathy, according to many experts, are key challenges and major barriers to educating students with disabilities in Physical Education (PE) (Lieberman, Houston-Wilson & Kozub, 2002). Lack of time, suitable programming, and budget issues are further obstacles to successful inclusion (Lieberman et al., 2006). On the other hand, students and educators can benefit from inclusion. For instance, students without disabilities can learn to accept individual diversity as well as obtain a different perspective on life's problems (Block, 2016).

Little physical activity affects one's health over a lifetime (Kohl & Cook, 2013). For students with disabilities, fundamental motor skill development during childhood is an important component of motor skill competency that can have long-term implications for physical activity participation (Wagner, Haibach & Lieberman, 2013). Physical activity and exercise (PAE) provide many benefits to overall health such as an increase in aerobic capacity, greater balance, improvement in gross motor functioning, muscle strengthening and an improved quality of life (Stancliffe & Anderson, 2017). Furthermore, a significant contributing factor to overweight and obesity is prolonged time with sedentary activities (Lenz et al., 2015). The more stimulated a student is to exercise, the more likely they will increase their time in physical activity (Gasperetti

et al., 2018). For example, physical educators can work to introduce students who are deafblind to activities that they may come to enjoy (Lieberman & Haegele, 2019).

Physical education teachers can modify the rules and regulations of any game or sport to assure that learning takes place in the physical education environment (Brian & Haegele, 2014). In addition, to accommodate the wide range of abilities and experiences among students, teachers can modify or change the equipment, the actions that students perform during an activity, the amount of space and boundaries for the movements, and the time used, and force applied during movements (Fleming & Bunting, 2007). By using modified equipment, children with disabilities and physical limitations may participate in similar fundamental motor skills and activities with their non-disabled peers (Haibach et al., 2014).

Fundamental motor skills need to be developed during childhood to maximize a child's future performance and capability in sport and recreational activities (Samalot et al., 2015). Therefore, it is important that all skills associated with motor skills movement are frequently assessed in a manner that can produce valid and reliable results to provide targeted interventions, physical therapy, or adapted physical education (Brian et al., 2018). The least restrictive setting has been viewed as the most desirable arrangement given its focus on effective practices as opposed to focusing on the setting itself (Leinhardt & Pallay, 1982). Moreover, according to the (CDC) Centers for Disease Control (2006), physical education programs that emphasize these health-related physical activities are critical for encouraging young people to participate in regular physical activity for a healthier life.

### **Statement of Inquiry**

While there may be an immense body of literature on the perspectives of classroom teachers and administrators, there is, unfortunately, a limited amount of literature on the lived

experiences of Adapted Physical Education teachers, especially in the state of New Hampshire. Consequently, Physical Education (PE) plays a vital role in helping students learn and refine their motor skills and this helps with obesity (Schedlin et al., 2012). However, students with disabilities need access to differentiated, inclusive opportunities for physical education (Van Munster et al., 2015). In fact, physical education teachers have reported that they face challenges in working with students with disabilities, due to the lack of specific information regarding how such students learned and how to effectively differentiate lessons (Conroy, 2012). Additionally, some administrators do not understand the value of Adapted Physical Education, due in part to the hazy nature of what Adapted Physical Education teachers do, and form assumptions about the discipline based on their intuition of the Physical Education program (Richards et al., 2021). The purpose of this study was to understand the perceptions of adapted physical educators as it relates to the barriers and challenges that exist such as class size, available physical space, administrative support, equipment, and funding.

### **Introduction to Focus of Practice**

This study is a phenomenological analysis (Smith, Flowers, & Larkin, 2009) of the challenges and barriers that Physical Education (PE) teachers who teach Adapted Physical Education (APE) have while engaging children with disabilities in general physical education in rural New Hampshire schools. Rather than approaching the inquiry from a top-down attempt to prove a particular theory or formula for creating an innovative culture, this research approached the phenomenon of teacher innovativeness from a bottom-up approach, seeking to understand the conditions that promote and sustain an innovative school culture through an exploration of teachers' own lived experiences in a particular context. Wiskochil et al. (2007) suggests that inadequate professional preparation, a lack of proper equipment, ineffective communication, a

lack of programming and curriculum expertise, and insufficient time in the schedule are identified to be the most significant barriers that prevent students with disabilities from participating in Physical Education (PE) class.

Physical Education (PE) teachers must constantly adjust and make modifications to general activities to meet students' personal goals and objectives (Munster et al., 2014). In addition, inclusion is a comprehensive approach to educating students with exceptionalities that advocates a total, systematic, and coordinated web of services (Peterson & Hittie, 2003). Foster et al. (2019) states, "The exploration and movement performed throughout the environment can broaden a child's perspectives of his or her world and knowledge; movement is crucial for the overall development of children with sensory loss (p. 40)." Furthermore, adapted, and general physical educators are expected to teach a wide range of learners with disabilities (Sutherland & Hodge, 2001).

According to Burhaein et al. (2020), "Adapted Physical Education aims to help students to integrate with the general population and achieve personal development through the medium of physical activity (p. 31)." Physical education teachers teach pupils, in school, how to play and understand a range of sports and physical activities (Armour & Jones, 1998). Moreover, equipment, instruction, and environmental differences can help students learn the intended skills, knowledge, and dispositions inherent to adventure programming (Grenier et al., 2018).

### **Potential Contributions to Practice and Scholarship**

Previous studies have looked at the characteristics that distinguish and make a significant contribution to Physical Education (PE) instruction; however, these factors have just recently been investigated in Adapted Physical Education (APE). Researchers have found that children who participate in regular physical activities exhibit higher energy levels and lower their risk of

heart disease, cancer, diabetes, osteoporosis, and other chronic diseases (Robinson & Lieberman, 2007). In addition, physical activity can also be used as a vehicle to better handle personal stress in adolescence (Barney et al., 2019). Physical activity standards prescribe that children engage in 60 minutes of moderate to vigorous physical exercise each day; however, research shows that 58 percent of children with disabilities do not fulfill this need (Mahy et al., 2010).

Students with disabilities must learn the same activities as their non-disabled peers in Physical Education (PE) class to make educated decisions about whether they like engaging in an activity (Haegele et al., 2014). Therefore, future educators should be able to examine the social dynamics of a physical education program for students with disabilities, as well as comprehend the students with disabilities (An & Decker, 2019). Ultimately, the goal was to gain a greater understanding of teachers' perceptions of including students with special needs in Physical Education, teachers' practices during Physical Education, identifying the barriers that exists in Adapted Physical Education including class size, funding, inclusion, physical space, curriculum, administrative support, and lack of student participation in the physical education class. Understanding these effects through the eyes of individual Physical Education (PE) instructors will aid Adapted Physical Education (APE) in evaluating and developing the traits that distinguish good teaching approaches for students with disabilities within their own organizations.

### **Purpose of Study**

The research problem is directly tied to the study's purpose and objective. This qualitative case study examined the perspectives of rural New Hampshire Adapted Physical Education (APE) teachers on the limitations and problems they face when integrating students with disabilities into General Physical Education (GPE) classes. Furthermore, the purpose of this

research was to learn about the experiences and conditions of Adapted Physical Education (APE) teachers in rural New Hampshire public schools as they implement and adapt their lessons for children with special needs.

According to Robinson & Lieberman (2004), physical activity enhances health-related quality of life by boosting psychological well-being, which contributes to human growth and social development for students with disabilities and physical limitations. Therefore, in addition, the purpose of this study was to raise awareness of the difficulties that Physical Education (PE) teachers face in providing high-quality Adapted Physical Education (APE) programs to students with disabilities, so that physical educators, administrators, and stakeholders have the information they need to affect change. This research also paves the way for future research on the experiences of Adapted Physical Education (APE) instructors, adding to the body of knowledge on other educators' perspectives.

### **Research Questions**

This phenomenological study sought to answer two questions.

1. What challenges and barriers do Adapted Physical Education (APE) teachers experience when including students with disabilities in general physical education?
2. What are the experiences of rural New Hampshire Public Schools' Adapted Physical Education (APE) teachers to implement and adapt their classes for students with special needs?

Furthermore, these research questions reflect a constructivist epistemology, attempting to understand the factors that support Physical Education (PE) teachers when including students with disabilities in their classes from their own perspectives.

## **Design of Study**

A design of study, according to Creswell (2013), has three components: research design, research methods, and inquiry strategies. A research design, according to him, is a proposal or plan for conducting research. Furthermore, a problem, a question, or apt topic is the beginning point for numerous applied research projects (Ravitch & Carl, 2019). A qualitative study is the research design that has been chosen. Qualitative research is a method of investigating and comprehending the meaning that groups or individuals attach to a human or social issue (Creswell & Creswell, 2018). Qualitative research allows the researcher to develop a more comprehensive, complete overview by analyzing words, reporting extensive participant perspectives, and conducting the study in a natural setting (Creswell, 1998).

Inquiry strategies are models that specify how processes in a study design should be carried out. Narrative research, phenomenology, grounded theory studies, ethnographies, and case studies are examples of qualitative research methodologies (Elements of Research Design, 2017). This inquiry was a phenomenological case study of the lived experiences of Adapted Physical Education (APE) teachers in rural New Hampshire public schools, grades K-12, as they pertain to the barriers and challenges that exist in the classroom when teaching students with disabilities.

Phenomenology is the description of an individual's immediate experience (Edmonds & Kennedy, 2017). Therefore, the primary goal of the data gathering process was to collect information about human behaviors and events. When research questions explore "how" or "why," and the focus is on a contemporary phenomenon in a real-life environment, a case study is employed because it is the preferred method of design (Yin, 2012). In case study research interviewing is the prominent method for collecting data (Rubin & Rubin, 2012).



This research studied the phenomenon of Physical Education (PE) teachers' perceptions on the implementation and adaptation of their classes for students with disabilities and special needs. For this reason, a phenomenological case study was an appropriate methodology for conducting the research. This was a case study because it was confined to only Adapted Physical Education (APE) teachers in rural New Hampshire public schools.

### **Setting**

Qualitative researchers frequently gather data in the field, at the location where participants are confronted with the problem or issue under investigation (Creswell & Creswell, 2018). This is frequently referred to as the natural setting. The setting for this study was rural New Hampshire, public schools, grades K-12, and Physical Education (PE) teachers that currently have students with special needs that are enrolled in the same classes alongside their non-disabled peers. Public charter schools and private schools were not part of this study to provide an in-depth analysis of the traditional public-school setting. In terms of Physical Education (PE), the natural setting can include gyms, playgrounds, weight rooms, cafeterias, auditoriums, parks, and aquatic centers. The state of New Hampshire is divided into the following ten counties: Belknap, Carroll, Coos, Cheshire, Grafton, Hillsborough, Merrimack, Rockingham, Strafford, and Sullivan. Within these ten counties there are 130 school districts, known as School Administrative Units (SAU) offices.

### **Participants**

The research design of this study is a qualitative, phenomenological study of the lived experiences of rural public schools Physical Education (PE) teachers currently working in grades K-12 in New Hampshire who currently teach students with special needs alongside non-disabled students. The participants were identified through intentional randomized sampling. The idea of

intentional sampling and carefully selecting individuals or places in qualitative research aided the researcher in understanding the problem and answering the research questions (Creswell, 2014).

After the researcher successfully obtained approval from the Institutional Review Board (IRB), the researcher started contacting the Superintendent and Principals via email at each of the rural School Administrative Units (SAU) offices that were randomly selected, and they were asked to identify any Physical Education (PE) teachers in their school district that met the following criteria:

- 1) possess a valid New Hampshire teaching credential in Physical Education (PE);
- 2) have at least one year of Physical Education teaching experience in that SAU; and
- 3) have at least one student with a disability enrolled in a general physical education class.

Creswell (2009) suggests 3-10 participants is a typical range for a phenomenological study. The researcher randomly selected a total of fourteen participants from rural schools in New Hampshire.

Involvement in the study was completely optional, and volunteers were not compensated for their time. The study considered two ethical issues: confidentiality and consent. Participants' anonymity and confidentiality were essential for protecting their privacy and gaining their trust. Therefore, all study-related correspondence was kept on a password-protected iPhone and MacBook Pro laptop computer, and all data was kept on a password-protected digital drive to which only the study's author had access.

At the conclusion of the study, all audio recordings were permanently deleted. All paper copies of data collected were kept in a locked office for the duration of the study and destroyed by the author once the study was completed. To preserve the rights and privacy of participants,

the researcher used honesty in reporting data, techniques, results, processes, and publishing status, as well as not falsifying, fabricating, or misrepresenting the data.

### **Data Collection Tools**

Data collection tools included semi-structured interviews which followed a modified Seidman's protocol (2013), and it included observations of Physical Education (PE) teachers. Case study interviews demand the researcher to work on two levels at once: meeting the line of inquiry's needs while also presenting friendly and nonthreatening open-ended interviews (Yin, 2012). Interviews were recorded using the researchers iPhone 12 Pro Max, and then transcribed verbatim using the 'Transcribe' app. The researcher had a back-up recording method and device during the interview process. This included the use of a Livescribe Echo Smartpen with 2GB of memory.

Knowing the purpose and being an active listener during the interview process was a key component to data collection. One of the interview questions included asking the Physical Education (PE) teachers, "What are the barriers that you believe exist in Physical Education when including students with disabilities in your class?" The purpose of a phenomenological approach to interviewing is to comprehend the genuine nature of the participant's experience from their subjective point of view by focusing on their lived experiences and the reflecting meaning they make of those experiences (Seidman, 2019). The specific interview questions that were used can be found in Appendix B and they were adapted from Hodge & Haegle, 2018.

The researcher followed Saldaña's protocol (2021) during observations. Therefore, it was extremely important to take notes on observed behavior, including how the teacher used equipment in the class. In addition, during the observations, it was crucial to note the teaching styles and approach of the APE teacher. Researchers have discussed the merits of different types

of supervisory interactions (models) during conferencing that typically have been categorized as nondirect (nondirective), collaborative or direct (Wright et al., 2015). Therefore, it was critical to take notes on where the physical education teacher positions themselves in the gym since some Physical Education (PE) teachers may not have the assistance of a paraprofessional or teacher assistants in their class.

The study's validity was strengthened through triangulation. To construct themes or categories in a study, researchers use triangulation, a validity technique in which they look for convergence among multiple and diverse sources of data (Creswell, 2014). This study used semi-structured interviews, observations, and the collection of documents and artifacts such as the teachers' syllabus, lesson plans, and the schools/teacher's website. Furthermore, individual students were not identified in the process of collecting data. Following each interview, the participants were emailed a copy of the transcribed interview. To ensure that their ideas were accurately reflected, participants were asked to view a draft of the manuscript. To increase dependability, credibility, and reliability, member checks were incorporated.

### **Data Analysis**

The coding strategy used for post interview analysis was derived from Saldaña (2021). This process includes, first, transcribing the conversation from the interview, and then using the coding technique developed by Saldaña (2021) of in vivo. The first step involved with in vivo coding consists of chronologically listing, clustering, and an outlining of codes (Saldaña, 2021). The second cycle coding method included focused coding. Focused coding involves clustered codes that are integrated into their categories. For example, physical space, funding, administrative support, curriculum, equipment, safety, class size, and the need for additional support. In a phenomenological research study, this is an effective approach of coding the

interview since it aids the researcher in summarizing the data, detecting themes and patterns while prioritizing and honoring the participants voice (Saldaña, 2021). Lastly, the researcher stopped interviewing additional participants once the data saturation point (that is, when no new themes emerge) was reached (Flick, 1998).

### **Assumptions and Delimitations**

Bloomberg and Volpe (2012) states that the delimitations and limitations pinpoint weaknesses evident in the study. Delimitations, according to Bryman and Burgess (1994), are circumstances that preclude a generic claim from being made. The researcher controls the delimitations, which include the objectives, variables of interest, research questions, theoretical perspectives embraced, and the population chosen (Simon & Goes, 2013). Furthermore, limitations may include the number of participants.

Only Physical Education (PE) teachers in the state of New Hampshire were sampled. This study was limited to Physical Education (PE) teachers that are currently employed at a rural public school (K-12). Only the Physical Education (PE) teachers that currently have students with disabilities participating in general physical education class were included in this study. Additionally, there may be a few rural schools that do not have students with special needs participating in general physical education classes. Therefore, the number of Physical Education (PE) teachers that teach Adapted Physical Education (APE) and are willing to participate and respond to my invitation to participate were limited as well.

One of my assumptions, when interviewing teachers, is that an Individualized Education Program (IEP) checklist for parents related to Adapted Physical Education (APE) may be helpful. It is believed that participants would respond to the questions honestly and freely, and that they will get no compensation for their participation other than the awareness that they have

contributed to the field of Adapted Physical Education (APE). Additionally, invitations to participate in my study included elementary, middle, and high school teachers; however, it may have only been accepted by high school Physical Education (PE) teachers, for example, and none from elementary or middle school physical education teachers. Regardless, the study's findings, which are qualitative in nature and reflect the participants' perceptions of their experiences with Adapted Physical Education (APE), are emphasized. Moreover, the current study would probably gain further depth and complexity if there were quantitative evaluations of students' learning during Adapted Physical Education (APE) and student voices were taken into consideration.

The study's relatively small sample size, geographic focus which is only PE teachers in New Hampshire, and the sample that included only Caucasians; a racially socioeconomically mostly homogeneous population are all legitimate limitations. In this study, there is a significant limitation when it comes to the diversity of the participants such as Caucasians to African-Americans, in all likelihood the study would be more robust and diversified if it included Asian and Hispanic participants as well. According to the U.S. Department of Education, National Center for Education Statistics (NCES), Schools and Staffing Survey (SASS) website, within the state of New Hampshire, there are a total of 15,700 teachers, and 97.8% are identified as White, non-Hispanic. Lastly, this study was not limited to a specific handicap condition or physical disability.

### **Definition of Key Terms**

*Adapted Physical Education:* The Individuals with Disabilities Education Improvement Act of 2008 (IDEIA 2008) continues to include Physical Education (PE) as a curriculum core area. Physical Education is required for all pupils with impairments. Adapted Physical Education

(APE) is a particularly tailored Physical Education (PE) program for a student with a disability. In addition, Block (2007) suggests that Adapted Physical Education (APE), is a physical education which has been adapted or modified, so that it is as appropriate for a person with a disability as it is for a person without a disability.

It should be noted that there is a distinct difference in the terminology that is used when distinguishing adapted versus adaptive physical education. Adapted is used in this context as a verb to describe the process of modifying (Winnick, 2005). For example, the rules, facilities, and equipment to afford youth with physical disabilities access to meaningful sport participation. Adaptive is an adjective that describes behaviors, skills, and functions such as one's ability to meet standards of maturation, learning, personal independence, and/or social responsibility (Winnick, 2005).

*Adapted versus Adaptive:* The official phrase is adapted physical education, which is used in federal and state guidelines as well as all current major publications, journals, and websites in the subject (Bloemen et al., 2015). The essential premise is that service delivery is adaptive, whereas behavior is not. Modifications and accommodations are made to the program to fit the needs of each student. Adaptive physical education refers to adapted behaviors and does not imply that the student must adapt to the program's settings. Furthermore, through modifications and accommodations, the regular physical education program is tailored to meet the special requirements of a student with a handicap (Kelly, 2006). Physical Education for people with disabilities is a service, not a location. If a student with a handicap requires specific physical education instruction to suit his or her individual requirements, the student's Individualized Education Program (IEP) team is responsible for determining whether the student needs specialized physical education teaching (Weiner, 2015).

The following terms are used throughout this study:

*Accommodation* - Changes in instruction and/or evaluation aimed at allowing students to fully access the general education curriculum without changing the content (NHDOE). In addition, according to the New Hampshire Standards for the Education of Children and Disabilities (2017), any change in instruction or evaluation that the IEP team determines is necessary but does not affect the rigor, validity, or both subject matters being taught or assessed is considered an accommodation. Furthermore, it is when children must change their schemas to “accommodate” the new information or knowledge (Piaget, 1953).

*Adapted Physical Education (APE) Teacher* - Is an educationally qualified expert capable of assessing individual students and developing, adapting, and implementing customized motor domain physical education programs (Sherrill, 2004). In the state of New Hampshire, a separate endorsement is not needed, and all General Physical Education (GPE) teachers have Adapted Physical Education (APE) responsibilities.

*Adapted Physical Education National Standards (APENS)* - The National Consortium for Physical Education and Recreation created these physical education standards in 1995, and by using them, Certified Adapted Physical Educators (CAPE) are produced on a national level.

*Assimilation* - According to Piaget (1953), assimilation is when children bring in new knowledge to their own schemas.

*Autism Spectrum Disorder (ASD)* - Defined by a lack of social and communication skills, as well as the exhibition of confined and repetitive interests and behaviors (American Psychiatric Association, 2013).

*Body Mass Index (BMI)* - Calculated by dividing body weight in kilograms by height in meters squared (Keys et al., 1972).



*Certified Adapted Physical Educator (CAPE)* - A certified adapted physical education teacher is qualified to make meaningful decisions for students with disabilities in Physical Education (PE) within every school district in the country (Sherrill, 2004). Because special education is a federally mandated component of special education services, the APE instructor is a direct service provider, not a connected service provider.

*CHARGE Syndrome* - Is multifaceted with complex anomalies, which may include a degree of vision and hearing loss at birth (Foster et al., 2020).

*Class Size* - What is the actual number of students enrolled in a particular physical education class in a public school.

*Diversity* - Defined as different ethnic backgrounds, but in the classroom, it is a combination of ethnicity, identity and biological differences that give varied experiences and understanding to everyone (Woolfolk, 2004).

*General Physical Education (GPE)* - An academic subject that focuses on developing motor skills, knowledge, and behaviors for active living, self-efficacy, sportsmanship, physical fitness, and emotional intelligence through a planned, sequential, K-12 standards-based program of curricula and instruction (Shape America, 2015).

*Inclusion* - As it relates to students with disabilities, means placing these students in regular physical education classes or general physical education (GPE) classes at the school they would attend (Mohnsen, 1997).

*Individual Education Plan (IEP)* - An official document prepared by a group of professionals to establish a guide or plan of action for teachers and specialists who serve students with disabilities in their educational process (Kowalski et al., 2005).

*Mainstreaming* - According to Farrell (1998) “mainstreaming” is about students with disabilities spending part of the school day alongside non-disabled classmates in a mainstreaming setting.

*Motor-Skill Development* - The changes that occur in our ability to move and our movement in general as we proceed through the lifespan (Payne & Isaacs, 2002).

*Paraeducator* - Are assistants who work alongside certified teachers to help students within the classroom (NEA, 2019). The National Education Association (2019) recommends that paraeducators have clearly defined roles and job responsibilities and should be trained and receive ongoing professional development. Paraeducators are frequently referred to as paraprofessionals, educational assistants, and assistant teachers.

*Pedagogy* - As defined by David Lusted (1986), addresses “the transformation of consciousness that takes place in the intersection of three agencies—teacher, the learner and the knowledge they together produce” (p. 3).

*Physical Activity* - One of the most accepted definitions of physical activity was identified by (Caspersen et al., 1985), “Any bodily movement produced by skeletal muscles that results in energy expenditure (p. 126).”

*Physical Disability* - A permanent or temporary condition that limits someone’s physical ability, capacity, or mobility. It could be brought on by an injury, disease, or a genetic condition (Albrecht et al., 2001).

*Physical Education (PE) Specialist* - One who is specifically certified to teach physical education (Gross & Buchanan, 2014).

*Physical Literacy* - Refers to the confidence, competency, motivation, knowledge, and understanding to value and take responsibility for engagement in physical activities throughout the lifespan (Brian et al., 2019).

*Rural School* - The definition of “rural” is not without its difficulties (Tieken, 2014). A geographic area of place in New Hampshire with fewer than 10,000 residents is considered rural according to the Small, Rural School Achievement (SRSA) program eligibility criteria, 2022, and the Rural and Low-Income School (RLIS) program eligibility criteria, 2022 (<https://oese.ed.gov>). A school with a total average daily attendance less than 600 or in a county with a population density of fewer than 10 persons per square miles (Title VI, n.d.).

*Teaching Experience* - The number of years of full-time teaching.

*Transformational Leadership* - Describes the activities of leaders who motivate followers to perform and identify with the organization’s goals objectives, as well as their capacity to motivate individuals to work above and beyond their typical productivity levels (Sarros, Cooper, & Santora, 2008).

*Title I School* - A school, according to statistics from a federal program, is eligible for financial support from regional educational organizations and where 70% of low-income students receive free or reduced lunches (Geiger & Pivovarova, 2018).

### **Significance of the Inquiry**

The present study is significant in its aim of exploring the responses and perceptions of rural public schools (K-12) Physical Education teachers in the state of New Hampshire to determine what barriers and challenges that exist in the classroom when teaching students with disabilities. Therefore, it was crucial to not only determine what barriers exist, but also to determine what was working well in their physical education classes. Furthermore, for students

to be able to play the named sports they must be included in developmentally appropriate progressions so that they may have the chance to learn the necessary physical education skills (Stribing et al., 2019). Therefore, it was extremely important to identify some of the barriers that teachers, administrators, parents, and students are facing in Adapted Physical Education. To examine ways to increase students with disabilities' physical activity levels during and beyond their adapted physical education classes to help students with disabilities create and maintain healthier lives.

The need to provide physical education to persons with disabilities is well documented and mandated in Public Law 105-17, IDEA (1997) and now Individuals with Disabilities Education Improvement Act (IDEIA) of 2004. Even though there are numerous federal regulations governing Physical Education (PE) for kids with disabilities, it is unclear what accommodations and modifications are currently being implemented to benefit these students. With unprecedented numbers of youth suffering from depression, obesity, attention disorders, and inactivity, the introduction of health into the K-12 curriculum offers opportunities for teachers of physical education to customize the classroom per the individual needs of the students (Fox & Hoffman, 2011).

IDEA mandates that the Physical Education (PE) teacher be held responsible for delivering appropriate Physical Education (PE) when executing the IEP (Public Law 94-142, 1977). However, the literature review and research indicate that most of the Physical Education (PE) teachers do not go to the Individual Education Program (IEP) meetings. According to Hong-Min (2014), "The field of modified physical education needs additional meaningful applied research to provide quality practices (p. 48)." This study aimed to identify the needs and experiences of Adapted Physical Education (APE) teachers in New Hampshire. Curricular and

teaching adaptations, instructional supports, and environmental conditions are considered by teachers and planners so that students can reach their maximum potential in cognitive, affective, and social domains (Lieberman et al., 2019).

Additionally, Lieberman et al. (2019) argued that it was imperative that opportunities are developed to increase self-determination leading to higher levels of physical activity for individuals with visual impairments. The physical education classroom needs to reflect best practices of adapted physical activity pedagogy; for example, individualized, modified activities, recording of progress, and task specific informational instruction (Goodwin et al., 2011). Furthermore, to increase students' motor abilities in Adapted Physical Education (APE), teachers must employ successful pedagogical tactics, such as matching individual teaching styles and learning strategies to each student (O'Connell, Lieberman & Petersen, 2006). It is crucial that physical educators are cognizant of the motor skills and interventions needed to educate and develop a specially designed educational program for students who are deafblind in the least restrictive environment (Haibach-Beach et al., 2019). Lastly, when considering the development of quality Adapted Physical Education (APE) programs, this study may provide direction and insight not only to physical education specialists, but also to school board members, administrators, parents, students, and the community.

### **Scholarship**

Numerous studies show that children with special needs have adopted a more sedentary lifestyle, leading to an increase in obesity among school-aged children, and that school-based Physical Education (PE) programs have been cut to provide more academic education (Ogden et al., 2006). Excessively large classes, ineffective equipment, a lack of parental support, insufficient training, inadequate facilities, lack of funding, and the failure of school

administration to support teachers' attempts to enable the necessary improvements are some of the barriers and challenges cited (Kelly, 2011). Because researchers have yet to set a baseline for what methods are now being used, it is impossible to quantify just how much Adapted Physical Education (APE) programs have been impacted by budget cuts. In addition, although inclusion places kids in the least restrictive setting as an important part of special education, it does not absolve schools of their responsibility to provide appropriate Physical Education (PE) depending on the requirements of each individual student (Combs, Elliot & Wipple, 2010).

### **Practice**

The IDEA legislation of 2004 stressed the importance of including students with disabilities in all aspects of education, including Physical Education (PE). Furthermore, the federal mandate's goal of creating a "level playing field" in which all children, regardless of disability, have a chance to achieve (IDEA, 2004) will be scrutinized. Considering federal standards, a comparison of what is happening in Physical Education (PE) for students with disabilities in New Hampshire versus what is thought should be happening is needed. Since 1975, when Public Law 94-142 was passed, schools and educational authorities have been required to provide "equal but reasonable" adjustments for students with special needs in Physical Education (PE). As previously stated, many schools are breaking the law by not providing specifically tailored Physical Education (PE) or instruction from a qualified, licensed, or CAPE instructor to kids with impairments. In New Hampshire, practical indicators and implementations of inclusion compliance have gone unchecked, which can be best handled by the findings of this study.

## Summary of the Inquiry

The research questions guided the content of this phenomenological case study that sought to examine the experiences of Physical Education teachers in New Hampshire who adapt their classes for students that have disabilities to determine the barriers and challenges that exist. Therefore, the interview is one of the most essential sources of information for a case study (Yin, 2012). In addition, several studies have been conducted on the perspectives of classroom teachers and administrators; however, the amount of literature on the lived experiences of Adapted Physical Education educators in the state of New Hampshire is limited. This could be attributed to the fact that New Hampshire does not have a specific set of standards and credentials for Adapted Physical Education (APE), thus quite possibly, leading to less qualified APE teachers.

Additionally, there may be some facilitators to successfully implement a physical education for students with disabilities. However, barriers such as a lack of professional preparation for teachers, and the attitudes of the public towards people with visual impairments, are currently keeping many children with visual impairments out of physical activity (Linsenbigler, Petersen & Lieberman, 2017). Furthermore, the need for qualified APE teachers has grown at a rate of 48% since IDEA was enacted in 1975 (Zhang, 2010). According to Barr & Shields (2011), “Some children require one-on-one supervision to participate because of safety concerns or behavioral issues (p. 1028).” As a result, there is now a substantial gap between Physical Education (PE) instructors from past generations and a growing group of instructors who are familiar with mainstreaming concepts, adaptations, and basic adjustments for students with disabilities. It is hoped that the knowledge gained from this study will add to the research on

barriers that exist for Adapted Physical Education (APE) teachers, specifically those that work with students that have physical disabilities and limitations.

Furthermore, this study attempted to explore the challenges and barriers that Adapted Physical Education teachers face as it relates to equipment and funding. According to Haibach-Beach et al. (2019), modifications such as bright color balls, beeping balls, and bright tape can aid a child's ability to practice specific gross motor skills. Therefore, it is critical that Adapted Physical Education teachers have the funding necessary to purchase these equipment items for the students in their classes that have disabilities and adequate class sizes. For example, for physical activity interventions with youth with visual impairments, the ability to voice-announce steps in conjunction with other motivational strategies (e.g., goal setting) may prove fruitful in promoting more active lifestyles (Beets et al., 2007). However, some of these devices can be expensive, and teachers are left with the question, "Who is going to cover the cost?" Therefore, it is extremely important that APE teachers have appropriate funding to provide necessary equipment for their students that have disabilities. According to Draheim et al. (2002), "The need for physical activity programs is further supported by the low prevalence of adults with mental retardation participating in the recommended frequency of physical activity (p. 440)." Coaching youth with blindness, visual impairments, or who are deafblind is an adventure in creativity (Lieberman et al., 2014). The voice of Adapted Physical Education (APE) is sometimes ignored; nevertheless, this study provided a voice for APE teachers in New Hampshire who would otherwise go unheard.



## **Section Two: Practitioner Setting for the Study**

### **Introduction**

The researcher of this study is a Physical Education and Health & Wellness teacher at a rural middle/high school in the state of New Hampshire that serves students in grades 6 through 12. Prior to working at this school, the researcher was employed as a Special Education teacher at an urban school in New Hampshire. The researcher has served in various teaching and coaching positions since 2007. Since the researcher has now worked as an educator for nearly 15 years and recognizes that he is approaching this study not as a detached observer, but as someone who is deeply invested in the field of PE and APE, in what it represents, in the community it continues to serve, and in its quest to provide excellent service to families and students with disabilities.

### **History of the Organization (Background)**

The history and origins of Adapted Physical Education (APE) in the United States can be traced back to the 1960's. The American Alliance for Health, Physical Education, Recreation, and Dance (AAHPERD) received a grant from the Joseph P. Kennedy, Jr. Foundation in 1965 to begin the Project on Recreation and Fitness for the Mentally Retarded (Winnick & Porretta, 2017). Since then, the laws and civil rights of students with disabilities have evolved. Now, if a student is identified as having one of the thirteen disabilities listed in the law and displays an educational need, federal legislation (i.e., IDEA) considers them qualified for special education, including physical education (Bittner, Foster & Lavay, 2021). Nearly 95 percent of students with disabilities (6-21 years) are educated in a general classroom setting for at least some portion of the school day, according to the 39th annual report to Congress on the implementation of IDEA (U.S. Department of Education, 2018); this unquestionably includes Physical Education (PE).

However, it is impossible to separate disability from race, culture, and economics, and equity will be impossible to achieve if some people of society, including students, are excluded and isolated (Jung, Frey, Fisher & Kroener, 2019).

Since Horace Mann introduced Physical Education (PE) into the Massachusetts Common Schools in the mid-1800s with the overriding goal of achieving a healthy body for productive physical work, it has been a vital aspect of a student's overall educational experience. Physical Education (PE) is still one of the primary sources of knowledge for students seeking to make informed decisions about their lifestyles as they relate to physical exercise and the prevention of life-threatening diseases such as diabetes and obesity (DePauw & Gavron, 2005). Especially when high blood pressure, obesity, and diabetes have all climbed dramatically in the United States in the recent decade.

Furthermore, the origins of Physical Education (PE) and Adapted Physical Education (APE) can be traced back to the early nineteenth century in Europe. Gymnastics became a well-known kind of physical activity and exercise with therapeutic advantages thanks to the gymnastics movement that originated in Sweden and Germany. Medical gymnastics and the Turnverein movements, which originated in Europe, inspired the establishment of physical education in the United States, especially physical education for people with disabilities (developmental, remedial, and corrective), and provided the foundation for future growth in Adapted Physical Education (Winnick, 2005).

Individuals with disabilities were frequently excused from physical education programs in the early 20th century, and specific physical education programs for individuals with disabilities were uncommon in the United States or elsewhere until the return of wounded veterans after the early 20th century's world wars created the need for rehabilitation (Huber,

1984). Moreover, it was thought that the considerable adaptations that children with impairments need for their training would interrupt the regular education process in Physical Education (PE). However, rehabilitation through physical activity and sport made its way to the United States, and these rehabilitation programs aided in the promotion of physical activity and exercise in public schools for people with disabilities. Originally established in accordance with the medical paradigm, these programs resulted in separate programs focusing on the rehabilitative and therapeutic components of physical activity. Throughout the 1950s, the phrase “corrective physical education” was used, but other titles such as “developmental” and “adapted” physical education would emerge.

Adapted Physical Education (APE) saw substantial development and growth in the 1970s. The expansion of APE school-based programs, as well as the development and extension of professional training programs in APE for faculty and teachers, were helped by federal law. As a result, the formation of academic journals, the adoption of professional standards, and the development and expansion of professional organizations opened the path for APE in the United States. The expansion and growth were visible on a national and worldwide scale. In the United States, the AAHPER aided in the implementation of APE and physical activity programs for people with special needs in public schools, as well as raising awareness of APE on a national and international level. After the passage of three significant federal law mandating access to education and sport for individuals with disabilities in the 1970s, including PL 93-112 Section 504 of the Rehabilitation Act of 1973, Education for All Handicapped Children Act of 1975, and PL 95-606 Amateur Sports Act of 1978 (amended and renamed in 1998 as the Olympics and Amateur Sports Act), APE for public schools would be more fully recognized (Winnick & Porretta, 2017).

## **Organizational Analysis**

In its programs, operations, and employment practices, the New Hampshire Department of Education (NHDOE) does not discriminate based on race, religion, color, age, sex, marital status, national/ethnic origin, sexual orientation, or handicap ([www.ed.state.nh.us](http://www.ed.state.nh.us)). According to the NHDOE, Physical Education is a K-12 program that includes cognitive content and learning opportunities in a variety of activities. In addition, quality Physical Education (PE) should encourage each student's optimum physical, emotional, mental, and social development through a range of scheduled activities, and should include activities and sports that all students love and can pursue throughout their life (Block, 2016). Physical Education (PE) in New Hampshire is taught by qualified and certified teachers.

The New Hampshire Department of Education (NHDOE) has very specific curriculum guidelines and expectations for Physical Education (PE). For example, the learning areas are psychomotor (health-related fitness, motor skills), affective (emotional well-being), and cognitive (knowledge). Furthermore, the NHDOE has six curriculum guidelines for Physical Education. Each of the six curriculum standards has its own set of rationale statements and student performance assessments. It is important to note that the New Hampshire K-12 Physical Education Curriculum Guidelines have not been updated since 2005 by the New Hampshire Alliance for Health, Physical Education, Recreation and Dance nor by the New Hampshire State Department of Education. Therefore, the viability of programming that has been created for Adapted Physical Education (APE) students but required adaptation under the IDEA to address the needs of children with disabilities could therefore be compromised by limited access to this kind of information. Nonetheless, listed below are the NHDOE Physical Education (PE) curriculum guidelines:

- Curriculum Guideline 1: Engages in a physically active lifestyle
- Curriculum Guideline 2: Achieves and maintains a health enhancing level of physical fitness.
- Curriculum Guideline 3: Demonstrates competency in motor skills and movement patterns, proficiency in a few, and applies these skills and patterns in a variety of physical activities.
- Curriculum Guideline 4: Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the development of motor skills and the learning and performance of physical activities.
- Curriculum Guideline 5: Identifies that physical activity provides opportunities for health enhancement, enjoyment, challenge, self-expression, and social interaction.
- Curriculum Guideline 6: Exhibits responsible personal and social behavior that respects self and others in physical activity settings.

According to the NHDOE (2005), quality physical education programs help students reduce the risk of heart disease, improve physical fitness, regulate, and maintain weight, acquire healthy active lifestyles, improve academic performance, and increase interest in learning. Furthermore, according to the New Hampshire Governor's Council on Physical Activity and Health (2004), these curriculum standards are created with the assumption that children will participate in physical activity daily. Physical activity refers to activities that are part of daily life, such as biking or walking to school, organized sports and exercise, and recreational activities like dancing or hiking. Moreover, children should engage in a minimum of sixty minutes of physical activity every day, according to current activity guidelines (NHDOE).

The NHDOE advocates that it is the combined responsibility of teachers, school board members, and administrators to establish educational programs in collaboration with their communities that will give chances for daily physical activity that go beyond the local school's physical education program. In addition, support from both the local community and the school community is essential to accomplish the high, yet attainable learning goals outlined in the NHDOE standards. However, the integration of modifications in Physical Education (PE) instruction, which can enhance the quality of interactions for a variety of learners, is something that many Physical Education (PE) teachers are unaware of.

### **Setting**

In New Hampshire's northern and western regions, the landscape is primarily rural (<https://www.nh.gov/municipal>, 2018). In contrast, the central, south-central, and southern regions of New Hampshire have the highest population densities (<http://www.nhes.nh.gov/elmi/products>, 2018). Moreover, half of New Hampshire's schools are in rural areas (Showalter et al., 2017). The state of New Hampshire is distinctive because it has the motto "*Live Free or Die*." Although there are some places that are heavily inhabited, many of the villages and small communities still have a rural atmosphere. Subsequently, most of the Physical Education (PE) teachers in New Hampshire are employed in rural areas.

Rural schools frequently do not generate enough tax income to cover their costs (Norton & Bird, 2017). Hinsdale, Berlin, Derry, Claremont, Northfield, Allenstown, Charlestown, Franklin, Newport, Pittsfield, and Milan are among the rural school districts that have suffered financially (Norton & Bird, 2017). In addition, rural communities anticipate that school obligations will be fulfilled with little resources (Budge, 2006).

Rural educators face additional challenges because of the community's expectations for tight school budgets and the declining financing and tax base (Williams & Nierengarten, 2011). Due to a smaller local tax base and a weaker economy, rural educators rely on less support. There is no exception to this social norm in New Hampshire (Starr & White, 2008). Furthermore, rural teachers must be resourceful and may rely on outside support from federal and state grants as well as community organizations (White & Corbett, 2014).

Recently, in November 2022, three rural schools in New Hampshire have come under consideration for assistance. Pittsfield and Franklin schools with academic difficulties will receive more state cash (NHDOE, 2022). Following their inclusion on a Department of Education list of the 23 worst-performing schools in New Hampshire, Pittsfield High School, Franklin Middle School, and Paul Smith Elementary in Franklin have all been singled out for further state assistance this month (O'Grady, 2022). The New Hampshire Department of Education (NHDOE, 2022) names the schools in the state that are having the biggest problems with student performance and academic accomplishment every three years. The federal Every Student Succeeds Act (ESSA) and the Consolidated State Plan for New Hampshire both call for the identification of these institutions. According to New Hampshire Education Commissioner Frank Edelblut, the Department of Education refers to the schools as "Comprehensive Support and Improvement Schools" and provides them with additional reviews, technical assistance, and monitoring to support improvement efforts (O'Grady, 2022). Edelblut stated, "They will also get funding to enable the implementation of feasible, high leverage, evidence-based practices, methods, programs, and services, with the aim of developing sustainable systems to support students and teachers in attaining higher levels of achievement." Moreover, when the list was last compiled in 2018, neither Pittsfield High nor Franklin Middle or Paul Smith Elementary were

included (O’Grady, 2022). Based on academic performance, growth, progress made toward English language competence, and equity, elementary and middle schools are chosen (NHDOE, 2022). Additionally, academic achievement, graduation rates under 67%, advancement in English language proficiency, and preparedness for college and career are used to identify high schools (NHDOE, 2022). Nevertheless, to give identified schools direct funding and resources, the Department of Education has set aside \$3.4 million from the state’s Title 1 allotment (O’Grady, 2022).

### **APE: Social Justice**

Like the approach of Berger (2014), there is a power of inquiry; can a school be built on questions, can we teach ourselves to question, how can a school better serve its community especially students with disabilities in Physical Education (PE)? While some may view this type of question as trivial, it may however, indeed be a steppingstone, or even a step in the right direction for educational leaders and schools, especially when it comes to sociocultural issues, social justice, and diversity in Physical Education (PE). Moreover, diversity is a strength of the United States of America. However, due to the nature of educational employment and an increase in segregation, diversity is difficult to attain even though its value is more apparent than it has been in the past.

Therefore, diversity of cultural experience is just as important as diversity of opinions within an organization (Minow, Shweder & Markus, 2008). In addition, for schools, educational leaders, Adapted Physical Education (APE) instructors and teachers, diversity brings both obstacles and opportunities, and a key purpose of multicultural education is to assist educators in minimizing the problems associated with diversity while maximizing its educational possibilities and potential (Banks, 2008). Nevertheless, varied perspectives on the world yield distinct



information, and as a result, different perspectives relate to their own concepts and theories (Hatch & Cunliffe, 2006).

Furthermore, we live in a society that is becoming more varied and mixed culture, with cultural influences and increasing immigration. However, many children in school continue to fail in comparison to their non-disabled counterparts due to language, race, low socioeconomic status, mental health, or physical limitations, and many of these students have been referred to, placed in, and treated in special education programs and Adapted Physical Education (APE) classes (Artiles, Trent & Palmer, 2004). Therefore, the Adapted Physical Education (APE) teacher and the school's administration team need to utilize a network of guidance that is created by this culture of honest assessment that is always growing. It also enables educational leaders and Adapted Physical Education (APE) teachers to choose the best ways to assist their students with disabilities in demonstrating ongoing adaptive quality improvement.

Despite assurances that everyone is equal and that anyone can succeed if they work hard enough, we know that communities and schools are clearly not equal; they are distinct and unequal due to differences in school resources, tax bases, and the quality of teaching staff (Quillian, 2002). Moreover, this notion is echoed in the writing of Bourassa (2017) that suggests students are taught that if they perform well, get excellent grades, and work extremely hard, they will be prosperous in other areas of life, especially in society and the economy. Furthermore, MacLeod (1987) expands on this argument, claiming that American culture adheres to a single concept of success while actively excluding significant segments of the population from achieving it and, it appears, even aiming for it.

Consequently, according to Baroody, Rimm-Kauffman, Larsen, and Curby (2014), there is a substantial link between students' academic and social achievement and the instructors'

relationships with them. Regardless, schools and Adapted Physical Education (APE) teachers are regularly confronted with technological, political, environmental, and sociocultural issues posed by the society context (College of Education, 2016). Moreover, a school and Adapted Physical Education (APE) teacher is required to exhibit the precise measures taken to provide unique chances for educationally able students whose access to excellent education has been restricted, hindered, or skewed (Deepak, Rountree & Scott, 2015). Therefore, many are grappling with new dangers and dynamic developments, which are forcing them to reconsider why they are required, what they do, and how they do it, especially in Physical Education (PE) when working with students that have disabilities (Berger, 2014).

One of the more widely held beliefs among educational theorists is that schools are one of the principal sites of social and cultural reproduction – places where pupils are corralled and ordered to reproduce current social arrangements (Bourassa, 2017). Furthermore, it is impossible to separate disability from race, culture, and economics, and equity will be impossible to achieve if some people of society, including students, are excluded and isolated in Physical Education (PE) (Jung, Frey, Fisher & Kroener, 2019). Therefore, Adapted Physical Education (APE) teachers should be able to broaden their grasp of major socio-cultural trends and their implementation to social justice leadership in a wide range of educational and workplace situations because of the school leader's strategy (Delpit, 2006).

In addition, individual and collective voice in Adapted Physical Education (APE) and the school's communities must be prioritized, as well as exploration of one's own social identities, unconscious bias and its influence on humanistic decision-making, and critical awareness of the implementation of socially responsible leadership practice (Westling & Fox, 2009). These elements of the strategy will continue to help Adapted Physical Education (APE) teachers,

school leaders and administrators in their organizations engage in behaviors that promote equality, inclusive societal change, and diversity. Consequently, the emphasis on professionalism and knowledge is part of a broader focus on reforms, including suggested improvements in Adapted Physical Education (APE) teaching and teacher preparation, with the goal of increasing student learning (Eggen & Kauchak, 2007).

According to Reisch (2002), the phrase “social justice” was first applied to a specific population or region with the goal of resolving the impacts of bureaucratic disparities, especially generational inequalities. Therefore, one of the most important strategies in social justice work is to make the invisible visible, to present both sides of the dialogue, and to show that the isolated, sanitized story of the privileged can only make sense in the context of accounts of those denied power (Anderson, 1988). Adapted Physical Education (APE) teachers can do this in many ways. For instance, Stephan et al. (2016) suggests that individuals and groups are the targets of positive social change programs, and the outputs are of a communal nature. In other words, cultural strength can impede performance when cultures do not encourage adaptation, but when society and the need for adaptation are in sync, cultural strength enhances the effectiveness and leads to improved performance (Hatch & Cunliffe, 2006).

Another option is to perform an evaluation of needs assessment at the school for Adapted Physical Education (APE). This could be the first step in the right direction since this process involves a process of critically establishing whether a program is required and how it could be improved if it has already been established at the school for Adapted Physical Education (APE). Furthermore, while this may seem self-evident, there is proof that schools frequently choose programs based on superb bandwagon popularity and salesmanship rather than true need (Carroll, 1994). Moreover, teachers have expressed their dissatisfaction at being expected to

adopt new programs without first phasing out old ones, or even worse, not giving the initial program enough time to run its course (Kennta, 1993).

Additionally, it may be difficult to layer one program on top of another, and it could confuse teachers and staff. Ultimately, Adapted Physical Education (APE) teachers and their leadership styles may be informed by their experiences of troubled and recalcitrant administrators or even parents. Perhaps, to address this issue and concern, Adapted Physical Education (APE) teachers and other educational leaders, in the future, could implement an evaluation of needs assessment to foster the advancement of social justice within their school. The evaluation of needs assessment provides an analysis that will help determine what should remain in the Adapted Physical Education (APE) curricula and what has fallen by the wayside (Adams & Salvaterra, 1997).

Because personal interactions are such an important part of daily life, interpersonal skills and emotional intelligence are essential (Bolman & Deal, 2017). Some administrators may want to see students and Adapted Physical Education (APE) teachers having fun while doing tough work in class. Therefore, another approach that could be implemented in Adapted Physical Education (APE) classes to promote social justice would be appreciative inquiry.

Appreciative inquiry is a method of questioning that aims to uncover prior achievements to guide future efforts (Jung, Frey, Fisher & Kroener, 2019). However, chronic absenteeism has evolved over the last decade from a totally unknown concept to a national education statistic that gives every school vital data on how many Adapted Physical Education (APE) teachers and students with special needs miss so much school that their academic achievement is compromised (Chang, Bauer & Byrnes, 2019). Perhaps, this has been accelerated with the presence of COVID-19. Moreover, when transitional phenomena do not exist naturally, it may be

essential for the change agent to generate them to help facilitate any form of social change (Morgan, 2006). Furthermore, the distinction between creating the positive and eliminating the negative is minor, yet it can have a significant impact, especially when it is in the Adapted Physical Education (APE) setting (Seligman & Csikszentmihalyi, 2000; Staudinger, Marsiske, & Baltes, 1995).

Remember that empathy is the most powerful weapon we have for connecting and developing trust, and it is the antidote to shame (Brown, 2018). Therefore, Adapted Physical Education (APE) teachers could potentially use empathy to help promote social justice in their classes and build appreciative resilience. Subsequently, the practice of appreciative resilience is built on the idea of leadership grounded in appreciative inquiry, and the process of appreciative resilience endures ways of being that inquire into what might be possible, includes others in both forward thinking and responsibility, and are built from a place of action integrity (McArthur-Blair & Cockell, 2018).

Another approach to foster advancement of social justice in Adapted Physical Education (APE) is outlined by Sautman (2020) which suggests that schools can create new ecosystems of learning and evaluation models, investigate the complex interactions of individual, cultural, and social domains in the classroom, develop an interpretive, individualized approach that enables teachers and students, and forthrightly critique and question tacit, and objectivist assumptions that misrepresent the school. This approach emphasizes the role of Adapted Physical Education (APE) teachers in bringing about societal transformation; however, this approach focuses specifically on equality for students that have disabilities under the social justice umbrella.

Sensoy & DiAngelo (2012) advise the following considerations to address the problems of social

justice: Disabilities extend outside individual intentions to cohesive group patterns, and a strong view is not the same as education understanding.

Perhaps, effective collaboration amongst those that work at the school would need to be implemented to promote the advancement of social justice, especially when it comes to Adapted Physical Education (APE). Therefore, Adapted Physical Education (APE) teachers plan and offer solutions to children who require them, collaborating with school administrators and general educators to track how students responded to initiatives and modify support as needed (Cooc & Kiru, 2018). In other words, while student growth continues to play an essential part in the Adapted Physical Education (APE) teacher assessment, states' definitions of student progress have been significantly enlarged to encompass more definitions and conceptions of growth (Close, Amrein-Beardsley & Collins, 2019). For example, students with disabilities in Adapted Physical Education (APE) classes could turn their positive qualities into educational achievements inside the Physical Education (PE) classroom, leading to increased academic achievement and eventual social justice prosperity, completing the social replication cycle (Jæger & Breen, 2016).

Adapted Physical Education (APE) teachers could utilize Professional Learning Communities (PLCs) as the primary tool for creating a high performing and more inclusive school. In addition, Adapted Physical Education (APE) teachers could potentially include weekly grade-level meetings to discuss students, problem-solve and share ideas/strategies, bi-weekly grade-level professional development sessions directed by teacher surveys or administrator observations, and weekly special education team meetings to audit IEP quality, share ideas and strategies, and discuss placement options for students. Therefore, throughout the first three months, each student with a disability has a new IEP meeting to modify and enhance the

effectiveness of the IEP as it relates to Adapted Physical Education (APE), and the IEP teams help meetings to reevaluate placement and accommodation decisions (DeMathews, 2015). As a result, a high percentage of kids could be given more opportunities to participate in Physical Education (PE) classes. Furthermore, PLCs may be used by the committee to combine co-teaching/planning workshops and regular teaching walks with the opportunity for educators to reflect, analyze, and exchange ideas to help promote social justice in Adapted Physical Education (APE) classes at the school (DeMathews, 2015).

Even more than directionality, perhaps the most important point is to recognize that there is a link between educators' beliefs, practice, and ultimately student outcomes, and that focusing efforts on affective beliefs, dispositions, and attitudes, which have a significant impact on student behavior, can be a critical component in helping us create and sustain classroom and school climates and cultures that foster student success (Truebridge, 2014). Consequently, the school's leadership team and the Adapted Physical Education (APE) teacher can be a powerful driver and advocate of social justice, which is why most educators have been attracted to it; needless to say, in APE it is their chance to be a change agent to promote social justice. Unfortunately, most of the white Physical Education (PE) instructors in the teaching profession, especially as classrooms progressively fill with children of color and immigrants in a country characterized by racial inequality, has significant consequences for white PE teachers' involvement in perpetuating racial and social injustice (DiAngelo, 2016).

In conclusion, Adapted Physical Education (APE) teachers may be a symphony, for which it is truly a work of art, made up of several moving parts. Adapted Physical Education (APE) teachers, administrators, and other school leaders continue to strive and to serve as the drum major; however, there are times when APE educators feel they are the guitarist that can

vaguely be heard in the background over the violinist. Consequently, Adapted Physical Education (APE) teachers may have a high level of segregation amongst students in their classes, students that have low test results, and a huge achievement gap amongst impaired and non-disabled students (DeMatthews, 2015). Educational leaders, particularly Adapted Physical Education (APE) teachers, may struggle for equality and personal rights for many individuals with disabilities in their classes, including students and groups who confront inequality and social injustice, as part of the social justice movement (Murdach, 2010). However, accommodation and assimilation are never-ending processes that represent Adapted Physical Education (APE) teacher's constant engagement with an unlimited number of objects to achieve social justice (Queen, 2009).

### **Leadership Analysis**

First, it is important to address and define the relationship between leadership theory and leadership practice, especially as it relates to Adapted Physical Education (APE). Middlehurst (2008) suggests that both leadership theory and practice are contingent on multiple levels, that theory and practice at any given time, typically over one or more decades, is associated with a cultural and historical context, and that studies are situated within specific, typically organizational, settings and are framed by methodological approaches and perspectives of specific disciplines. According to Baroody, Rimm-Kauffman, Larsen, and Curby (2014), there is a substantial link between students' academic and social achievement and the instructors' relationships with them. It is important to note this, especially since Adapted Physical Education (APE) teachers need to have the appropriate leadership knowledge and practices to handle problems and address concerns, moreover, principals must combine technical competence in



school administration and instructional leadership methods with social justice concepts to help support Adapted Physical Education (APE) teachers.

Second, it is crucial to examine what constitutes leadership theories and leadership practices that might foster successful innovation. Leadership encompasses not only the Adapted Physical Education (APE) teacher leader's personality, but also their actions in a variety of situations needing leadership, with many individual and collective prospective followers (Cameron & Green, 2017). Hoffman, et al. (2011) found that knowledge and skill attributes such as communication skills and interpersonal, problem solving, decision making, and other managerial abilities were consistent predictors of effective leadership, though their impact was modest overall; however, this does suggest that leadership can be developed. Additionally, separate leadership is based on the rights and ethic of justice, whereas connection leadership is based on connection and ethic of care, and constructed leadership is founded on a balancing between the ethics of justice, rights, care, and connection (Cockell, 1999). This is relevant since some Adapted Physical Education (APE) teachers may need to analyze and draw a comparison between their students, parents, administrators, and on their perseverance, determination, personal strength, and experiences that shape their leadership practices in the classroom.

Moreover, a good leader fosters an atmosphere where individuals can be themselves and get the constructive criticism, they require to become better people and teachers (Kegan, Lahey & Miller, 2016). In addition, Cameron & Spreitzer (2013) suggest that innovation consists of three different components which include strategic, individual, and organizational. Furthermore, innovation is a critical component of growth and progress, and it is often seen as one of humanity's most distinctive achievements (Cameron & Spreitzer, 2013). Therefore, the strategic level of innovation incorporates dynamics that are actual and quasi-perceptible, the disorderly

environment and situational elements that both generate possibilities for organizations to innovate and expand frequently confound those organizations' reaction due to the unclear structures and dynamics of these forces (Cameron & Spreitzer, 2013). Despite this, genuine transformation remains elusive.

Research shows that transformational leadership might help to promote appropriate socialization (Cameron & Spreitzer, 2013). The transformational leader provides motivation, inspiration, positive influence, and individual stimulation (Avolio, Bass & Jung, 1999). Furthermore, transformational leaders are aware of their students' requirements and are wise to adapt their leadership styles according to the circumstances; like situational leadership, it is all about flexibility and change (Porath, 2015).

Social entrepreneurs should promote appropriate social interaction by finding new methods to awaken positive tendencies in people (Praszkier & Nowak, 2012). In addition, it seems a bit cliché, but education leaders need to be brave and advocate for social justice, equity, inclusion, and most importantly, do not be afraid to stand up for what is right, even if you find yourself isolated in the beginning. Bravery requires the Adapted Physical Education teacher, i.e., the leader, to dedicate time to recognizing and assessing the risks associated in taking on a project and strive to get the most out of difficult circumstances while keeping in control of any fears they may have (McQuaid & Lawn, 2014).

If we agree that creativity and innovation are critical to our ability to adapt, thrive, and survive, the question then becomes how our schools, Adapted Physical Education (APE) teachers, and communities can expand and practice their capabilities and skills to develop new, more innovative leadership mindset for the future of our students and schools (Paxton & Van Stralen, 2015). An example of this could happen when an Adapted Physical Education (APE)

teacher believes they have effectively conveyed the need for formative assessment and the pedagogy to implement it. On the other hand, a damaged organization may exhibit this breakdown between cognitive perception of communication and real communication (Adolfsson & Håkansson, 2019).

Moreover, Cameron & Spreitzer (2013) suggests that the organizational component of innovativeness contains the entirety of a network that competes as an organization, the organization itself, or a division of the organization. So, how is this relevant to Adapted Physical Education (APE)? Within the context of physical activity and Adapted Physical Education (APE), this could include the school itself, the school district, and the New Hampshire Department of Education (NHDOE). Furthermore, the individual component to innovativeness, that is the level of the Adapted Physical Education (APE) teacher, innovator, and leader, i.e., principal at the school, common core teachers, and quite possibly the superintendent of the school(s) may require transforming their mindsets.

Consequently, the work of Jack Mezirow (2000), articulated that a transformative leader has the skills to broaden one's worldview or behavioral patterns of imagination that leads to being quite inclusive, open, differentiating, reflective, and emotionally capable of change, where the leader as the opportunity to engage in existence with a larger level of self. Moreover, this process may require the Adapted Physical Education (APE) teacher as a leader to persevere. McQuaid & Lawn (2014) suggest that even if you have obstacles along the way, you choose to make progress toward your goals rather than allowing pessimism or hurdles to stop you.

This is important because Adapted Physical Education (APE) teachers and positive leadership entails the use of a variety of positive behaviors to help people and organizations reach their full potential, thrive at work, feel more energized, and achieve levels of performance

that would otherwise be challenging to achieve (Cameron, 2013). In addition, developing your abilities should be a win-win situation for you, your team, and your school (McQuaid & Lawn, 2014). Furthermore, to live an integrated life, Adapted Physical Education (APE) teachers must bring together the primary parts of your personal and professional lives, such as work, family, community, and friends, to be the same person in each setting (George & Sims, 2007).

The greatest Adapted Physical Education (APE) teachers and coaching managers are adept at detecting windows of opportunity when coaches are more open and eager to learn, stress levels are low, and coaches have time and energy to devote to the apprentice (Wise & Hammack, 2011). The importance of coaching discourse in the creation of clarity for ideals, dreams, and the premise that the more you know about where you want to go, the easier it will be to locate the routes that lead there (Lussier & Achua, 2013). For example, Scharmer (2018) describes a process referred to as the eye of the needle, in which the goal of systems thinking is to assist people in closing the feedback loop between system enactment on a behavioral level and its source at the level of awareness and thought. This is noteworthy since several laws have been passed to address issues in education related to disability, special education, equity, social justice, inclusion, and basic human civil rights of students directly correlating with Adapted Physical Education (APE).

For example, the Elementary and Secondary Education Act (ESEA) which was signed into law by President Lyndon B. Johnson in 1965 (Fusarelli & Ayscue, 2019). The Every Student Succeeds Act (ESSA) has provided states with unprecedented opportunity to set their own goals for teaching and learning in public schools, as well as to develop accountability systems that go beyond standardized test scores (Schettino, Radvany & Wells, 2019). More recently, this emphasis can be seen in federal legislation, such as the well-known and somewhat contentious

No Child Left Behind Act of 2001, which has a major section calling for greater teacher quality (Eggen Kauchak, 2007). These federal laws are a direct outcome of research showing that Adapted Physical Education (APE) teachers and administrators have a significant impact on student progress and that under qualified instructors are frequently assigned to poor, minority, and both rural and urban children (Darling-Hamond & Baratz-Snowdon, 2005). Therefore, it is critical to sort out and separate the numerous approaches an Adapted Physical Education (APE) teacher and school district can take to comprehend and analyze the dynamics of change, particularly the requirements of effective change implementation (Spector, 2012).

Adapted Physical Education (APE) learning requirements should be included to aid in individual development and to foster a sense of shared responsibility for bringing about improvements in all other classes (Dantley, 1990). Nevertheless, when it comes to meeting the learning needs in Adapted Physical Education (APE) for students with disabilities, it is also critical to identify shared improvement priorities that are relevant to a wide range of stakeholders, i.e., common core subjects (Connell & Ashendon, 1982). Therefore, problem-oriented communication should always be tied to established norms or expectations rather than personal ideas to build healthy, supportive relationships (Cameron, 2013).

In a dissipative structure, anything that disrupts the system is critical in assisting it in self-organizing into a new form of order (Wheatley, 2006). There is a relation to the aforementioned information as it directly involves the values of the Adapted Physical Education (APE) teacher and leader, whereas different individual values have a correlation to the dynamics involved in the decisions and applications for improvement. For example, an Adapted Physical Education (APE) teacher's benevolence values refer to prioritizing the promotion and protection of the well-being of individuals with whom one has direct interactions, whereas universalism values prioritize

broader concerns such as equality and social justice, as well as prosocial motivation (Schwartz & Bardi, 2001).

Furthermore, Burns' *Leadership* (1978) defined two forms of leadership; transactional leadership, which focuses on the leader-follower connection, and transformational leadership, which focuses on the followers' beliefs, values, and needs. Furthermore, Burns' transformational leadership theory, in other words, assesses how a leader approaches power by focusing on motivations and principles. This feature of having a basic ethical philosophy distinguishes leaders from those who only seek power. Leadership also necessitates an understanding of the bigger picture, of paradigms that guide us, beliefs that nourish us, ideals that steer us, and values that inspire us, as well as our worldviews (Valk et al., 2011).

In addition, research shows that transformational leadership might help to promote appropriate socialization (Cameron & Spretizer, 2013). Consequently, the transformational leader provides motivation, inspiration, positive influence, and individual stimulation (Avolio, Bass & Jung, 1999). Therefore, a transformative leader in Adapted Physical Education (APE) is also a change catalyst, having the ability to predict and adapt to change before it occurs; they are never satisfied and certainly not complacent with their professional accomplishments (Connors, 2020).

Transforming leaders are conscious, self-aware, and driving to make each day a masterpiece as they create innovative ways to take their organization ahead (Watkins, 2013). Another leadership practice that might foster innovation in Adapted Physical Education (APE) is social entrepreneurship. Moreover, social entrepreneurs should promote appropriate social interaction by finding new methods to awaken positive tendencies in people (Praszkier & Nowak, 2012).

Notwithstanding, the most effective leaders and Adapted Physical Education (APE) teachers can promote thankful intelligence throughout a school, and they provide methods and activities for students to utilize to boost their own appreciative intelligence and become more resilient, successful, creative, and personally fulfilled (Ketter, 2006). In addition, Adapted Physical Education (APE) teachers could potentially implement partisanship for the sake of accomplishing school goals. When partisanship is needed to solve genuine differences in goals or methods of achieving goals, the coalitional model of decision-making, according to March (1994), resolves conflicts and thus allows decision-makers to act quickly under uncertain circumstances that most teachers face almost all the time.

Because the Adapted Physical Education (APE) teacher plays such a vital role in transmitting status information to students, certain leader traits may have an impact on the effectiveness of their procedural fairness (Van Dijke et al., 2012). Smith, et al. (1998) found that the fairness of an ingroup leader's treatment has a higher influence on group member's self-esteem and self-perceived status than the fairness of an outgroup leader's treatment. These concepts are supported and emphasized throughout the literature over the past couple of decades. Specifically, Brown (2018) suggests that educational leaders with critical thinking skills, the ability to synthesize and analyze information on building trust, rethinking educational systems, inspiring innovation, including common political ground despite increased polarization, making difficult decisions, and the importance of relationship building and empathy in the context of fostering successful innovation are all needed.

Some school leaders and Adapted Physical Education (APE) teachers have blamed a lack of guts, some blamed a lack of abilities, and unexpectedly, more than half blamed a cultural standard of niceness and politeness for avoiding difficult dialogues. Therefore, there is an

obvious connection between leadership practices for innovation and the Adapted Physical Education (APE) teacher. For example, Louis, Leithwood, Wahlstrom & Anderson (2010) suggests that leadership is distributed unequally among schools, and that those with leadership deficits, in addition to other challenges, i.e., high urbanity and high poverty, struggle more than those without.

In addition, applying the appropriate leadership by the Adapted Physical Education (APE) teacher is another component that would need to be implemented to foster advancement. For example, transformative leadership, according to Shields (2010) suggests that the Adapted Physical Education (APE) teacher recognizes the need to begin with essential analysis and reflection and proceed through awakened comprehension to action; action to right wrongs and guarantee that all students at the school are supplied with as level a playing field as conceivable, not only in accessibility but also in terms of social, academic, and civic outcomes. Moreover, there is often not a clear distinction between the many cultures that exist inside and outside of the classroom when it comes to Adapted Physical Education (APE). Nevertheless, at times some Adapted Physical Education (APE) teachers may have felt like this is a weakness and as a result insufficient as a catalyst of social change at the school and within their APE classes.

Notwithstanding, everyone has felt cast away, more alone, undeserving, and ashamed because of a moment of weakness (Kagan, Lahey & Miller, 2016). Perhaps, Adapted Physical Education (APE) teachers share these same emotions when teaching students with disabilities. For example, some Adapted Physical Education (APE) teachers may grapple with administrative pushback, collecting sufficient observational data, and may at times experience personal dissatisfaction by statements that challenged their credibility (DeMathews, 2015). Therefore, it



may not be uncommon for Adapted Physical Education (APE) teachers to object and resist change.

Regarding the actions by educational leaders and Adapted Physical Education (APE) teachers to promote inclusions, APE teachers, and administrators, during the pre-service week in August before school starts, can focus on an assortment of data points to engage students with the idea of inclusiveness. For example, data points that focus on improving poorly written and general Individualized Education Programs (IEPs), focus on a large percentage of students with disabilities that may be isolated, and helping students with special needs that do not participate in Physical Education or performed badly while they are in PE class. In addition, Adapted Physical Education (APE) teachers can work with the school's administrators to help restructure the school's resources, conduct professional development, and track success for students that have disabilities in Physical Education (PE). Moreover, Adapted Physical Education (APE) teachers can work with educational leaders at their school to form committees that include a special education teacher, the assistant principal, a school psychologist, general education teachers, and if available, the school's physical therapist to monitor the establishment of a more inclusive school.

Additionally, teachers that can choose natural supports over specialized ones, especially in Adapted Physical Education (APE), teachers are making a more inclusive decision (Jung, Frey, Fisher & Kroener, 2019). Moreover, the governance and operating methods are frequently dedicated by the Adapted Physical Education (APE) teachers, leaders, administrators, and directors. Even if the school and organizations are entwined under Adapted Physical Education (APE) and special education models, the diverse operation procedures and governance may vary greatly.

Furthermore, the pursuit of knowledge and familiarity with the theory of governance inside your organization and school is critical for advancement in the field of Adapted Physical Education (APE) and career (Hunt & Weintraub, 2011). Moreover, according to DeMatthews (2015), because social justice leadership pursues equity, i.e., all kids get what they need, across all school experiences and opportunities, it goes beyond good administration and leadership. Notwithstanding, an Adapted Physical Education (APE) teacher that is a transformative leader can build a foundation for a school community that focuses on fair and equal practices particularly for student of color, students with disabilities, students in poverty, English Language Learners (ELL) students, and any other marginalized student by first recognizing inequalities within the school community and dissecting their basis (Graham & Nevarez, 2017).

Ultimately, this may require the Adapted Physical Education (APE) teacher as a leader to take some risks, try new and innovative ideas, and more importantly, reject the fear of failure. Nevertheless, Adapted Physical Education (APE) teachers have taken risks and worked incredibly hard for as long as there have been schools to provide their APE students that have special needs with possibilities that would otherwise be out of reach (Scheurich & Tillman, 2013). In addition, one thing the Adapted Physical Education (APE) teacher could do to be an innovative leader is to create a podcast for their school district or even the state in which they work. For example, Dr. Scott McNamara at the University of New Hampshire (UNH) has created and maintains the What's New in Adapted Physical Education (APE) podcast. Each week the Adapted Physical Education (APE) teacher could have interviewed different teachers, employees, and staff at the school, even a bus driver within the state where they are employed. This is an innovative approach as an Adapted Physical Education (APE) teacher to communicate

to parents and the community on current events and information regarding the school and the state's APE program.

In conclusion, while the various leadership attributes of the Adapted Physical Education (APE) teacher, functions, and general description that make up the nature of innovation as a range of activities that creates positive forms of deviance problematic, there is some common ground around the nature of innovation as an APE teacher that as a range of activities that create positive forms of deviance (Cameron & Spreitzer, 2013). Moreover, Adapted Physical Education (APE) teachers as educational leaders have a responsibility to help the entire school examine itself, to be introspective and learn about its activities and decisions; we need these APE leaders in this chaotic environment (Wheatley, 2006). Ultimately, in order to add value to students with special needs at the school, the Adapted Physical Education (APE) teacher as a transformational leader must first look inward and be clear about his or her values, strategy, and goals; it is only after this that the APE teacher as a transformational leader then understands that driving change and action required to building relationships and doing so with empathy and an authentic desire to uplift student (Connors, 2020). Furthermore, it is crucial that the Adapted Physical Education (APE) teacher becomes aware of how students in his or her school are marginalized and the impact of segregation in their Physical Education (PE) classes. It is now, more important than ever, that Adapted Physical Education (APE) teachers self-reflect and see the need for change, and the literature supports that it is equally important that the APE teachers be an agent for change as well. Let us never forget that many Adapted Physical Education (APE) teachers and educational leaders began their careers out of a deep desire to improve things for students with disabilities they know, students that have special needs that they care about, students with limitations who have faced systematic obstacles similar to those they may have faced as a

student in Physical Education (PE), and, very possibly, just because they care about student's welfare in general.

### **Implications for Research in the Practitioner Setting**

Even more than directionality, perhaps the most important point is to recognize that there is a link between educators' beliefs, practice, and ultimately student outcomes, and that focusing efforts on affective beliefs, dispositions, and attitudes, which have a significant impact on student behavior, can be a critical component in helping us create and sustain classroom and school climates and cultures that foster student success (Truebridge, 2014). Therefore, the findings of this study will aid me in developing a practitioner product that will assist New Hampshire Physical Education (PE) teachers, administrators, and schools in positively identifying what barriers exist and how PE teachers are meeting the needs of students with disabilities in the general physical education classes.

Physical Education (PE) as part of the regular school curriculum is crucial in this contemporary health crisis (Corbin & Pangrazi, 1998). Furthermore, heart disease is the leading cause of death in the United States today. The Centers for Disease Control and Prevention (CDC), the Surgeon General and the American Medical Association have all issued strong public statements recognizing inactivity as one of the four key modifiable risk factors for heart disease. Daily physical activity as a progressive strategy of addressing these hypokinetic disorders has been supported in documents from all three organizations.

Individuals who want to live a physically active lifestyle must have a basic understanding of human physiology as well as the attitudes and skills that promote safe, frequent activity. Physical Education (PE) provides the fundamental foundation of movement and physical activity knowledge, dispositions, and skills (Sherrill, 2004). Students can be steered toward a longer life

via healthy living by receiving quality training for professional physical educators. Physical Education (PE) emphasizes that students have their own distinct physical capabilities and oversee their own well-being, from motor skill instruction to movement concepts (Bruno, 2020). However, the literature indicates that students with physical limitations are often thought of as being inferior, and frequently, are not afforded the same opportunities as their non-disabled peers in the Physical Education classroom.

### **Summary of Practitioner Setting**

Because their function in the education of kids with special needs is not always apparent, Adapted Physical Education (APE) teachers are sometimes ignored (Lieberman & Houston-Wilson, 2011). In addition, unfortunately, most Adapted Physical Education teachers are ineffective when it comes to utilizing the assistance of paraprofessionals or teacher assistants, and they have struggled to convince assistants to fully participate and assist during Physical Education (PE) sessions (Horton, 2001).

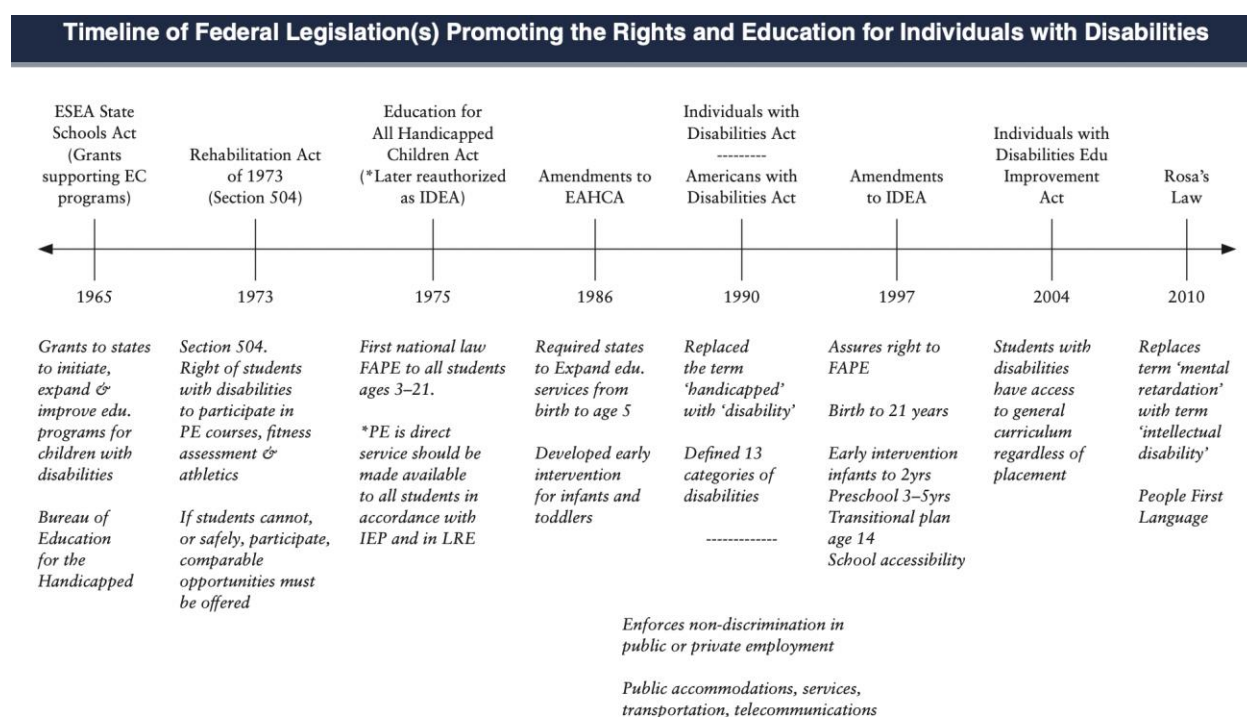
Stuart, Lieberman & Hand (2006) suggests that in certain circumstances, teachers' lack of expertise with incorporating students with disabilities explains the lack of engagement in Physical Education (PE) classes. Furthermore, Physical Education (PE) teacher effectiveness includes many characteristics such as course preparations, student-teaching experience, and hands-on participation (Bastian & Janda, 2018).

## Section Three: Scholarly Review for the Study

### Introduction

The gathering of supplementary materials utilized several databases, including ERIC, Google Scholar, EBSCOHost, and Academic Search Complete. In addition, the timeline of federal legislation promoting the rights and education for individuals with disabilities identifies the various landmarks dating back to 1965 as shown in Table 1:

Table 1: *Timeline of Federal Legislation(s) Promoting the Rights and Education for Individuals with Disabilities*



In addition, there are thirteen qualifying disabilities that fall under Adapted Physical Education (APE). According to IDEA, these disabilities include the following: Autism Spectrum Disorder (ASD), Deaf-Blindness, Deafness, Emotional Disturbance, Hearing Impairment, Intellectual Disability (i.e., Down Syndrome), Multiple Disabilities, Orthopedic Impairment, Other Health Impairment (OHI), Specific Learning Disability (SLD), Speech or Language

Impairment, Traumatic Brain Injury, and Visual Impairment (VI), which includes complete Blindness.

Now more than ever before, the prominence of children and adolescents' health is evident. Obesity in children has doubled and quadrupled in adolescents over the last 30 years (Whiteman, 2014). Even our military is starting to feel the pinch from the American obesity epidemic. According to Harkins (2020), “More than 70% of young Americans remain unable to join the military due to obesity, education problems, or crime and drug records.”

Students should get 30 to 60 minutes of cumulative physical activity on all or most days, according to guidelines (Corbin & Pangrazi, 1998). There are several options available to meet these recommendations and guidelines in Adapted Physical Education (APE) classes. For example, strength training, weightlifting, and resistance exercise is a popular training style, and many young and healthy people prefer it to aerobic exercise (Tsuk et al., 2019). Students with disabilities can also compete in the Special Olympics if they choose. Currently, the Special Olympics sponsors over 6 million athletes, 1 million volunteers and coaches, and hosts over 100,000 tournaments every year in over 190 countries, offering 32 Olympic-style sports (Hansen & Weaver, 2019). Special Olympic student-athletes can share their struggle for achievement, the satisfaction and joy of success, and, of course, the anguish, disappointment, and grief they experience when their individual and collective efforts fall short of the goal (Vernacchia, McGuire & Cook, 1996). Ultimately, success stories of this nature highlight the advantages of interventions, adjustments, and adaptations made for children with impairments.

Additionally, obesity in childhood has been linked to adulthood obesity, and students that have special needs who are physically active as youngsters are more likely to become active adults who will benefit from exercise throughout their lives (Boffoli et al., 2011). Additionally,

evidence indicates that increasing physical exercise and fitness can help students with disabilities do better in school (Hillman, Erickson & Kramer, 2008).

The purpose of this study was to explore the experiences of rural New Hampshire Public Schools' Physical Education teachers to implement and adapt their classes for students with special needs. Adapted Physical Education (APE) has many characteristics and often opposing definitions. Hastata, Sugiyanto & Hidayatullah (2019) suggests Adapted Physical Education (APE) for special needs children serves a comprehensive aim, like Physical Education (PE) goals for typical children, such as boosting growth, movement skills, physical development, social, and intellectual development. Although academic performance stems from a complex interaction between intellect and contextual variables, health is a vital moderating factor in a child's ability to learn (Basch, 2011). The idea that healthy children learn better is empirically supported and well accepted. Children who feel and know that they can successfully perform an exercise feel satisfied in their need for competence (Brian et al., 2019). In addition, if children do not believe that they are as good as their peers in an activity, they will be less likely to participate in Physical Education class (Stribing et al., 2019).

Some students may have challenges to find something that interests them during their education, and others have mental or physical barriers that they must overcome (Grenier et al., 2014). The concept of inclusion provides students who have disabilities with meaningful opportunities within the educational system through interaction with their "nondisabled" peers (Smith & Cestaro, 1998). Smaller classes can result in greater attempts to individualize instruction and improve classroom environment, both of which can lead to more positive attitudes in students (Smith & Glass, 1980). Additionally, individuals with disabilities are seen as possessing lower status and are often the victims of bullying (Danes-Staples et al., 2013).



Moreover, Bird and Gausneder (1979) found that 79% of physical education teachers had no practicum experience during their undergraduate education related to children with disabilities. Therefore, when discussing the inclusion of children with disabilities in Physical Education (PE), these experts' notions of inclusion must be understood (Tanure Alves et al., 2017).

Research has shown that some physical education teachers do not attend IEP meetings. Attendance at IEP meetings would allow adapted physical education teachers to exchange information with all members of the team, but most important with the parents (Perkins et al., 2013). Butler and Mergardt (1994) found that gaining administrative support was the most significant factor in creating and maintaining effective physical education programs. Additionally, Adapted Physical Education (APE) teachers often must take on challenges associated with assumptions and marginalization about their work based solely on negative experiences with Physical Education teachers at the school (Richards et al., 2021).

### **Physical Education and Children with a Disability**

Children with disabilities are four times more likely to develop health-related conditions due to a lack of physical activity (Yun & Beamer, 2018). However, existing studies revealed that, when done correctly and appropriately, including students with disabilities may be a very effective substitute for the self-contained classroom. Moreover, engaging in sport and physical activity is a social activity involving groups of children such as teams, friends, and clubs and serves as a primary socializing agent for teaching interpersonal skills (Shapiro et al., 2003). Notwithstanding, for many students with disabilities, general physical education (GPE) is not a positive experience (Grenier, 2011). Furthermore, children with disabilities are of great concern because, traditionally, they have a higher level of obesity and inactivity than their peers without disabilities (Foley et al., 2008).

Physical disability (PD) and neurodevelopmental disorders (NDD) are the two main types of disability in children. Notwithstanding, all disability groups show that children with disabilities participate in less Physical Education (PE) than their peers without disabilities (Li et al., 2016). Moreover, Physical Education (PE) participation for a student with a disability is influenced by the interaction between the type of disability, motor development, physical skills, family environment, and personal Physical Education (PE) preferences (Li et al., 2016). Therefore, the student's limitations linked to a disability may also provide unique challenges for individuals that are directly associated with their involvement in Physical Education (PE).

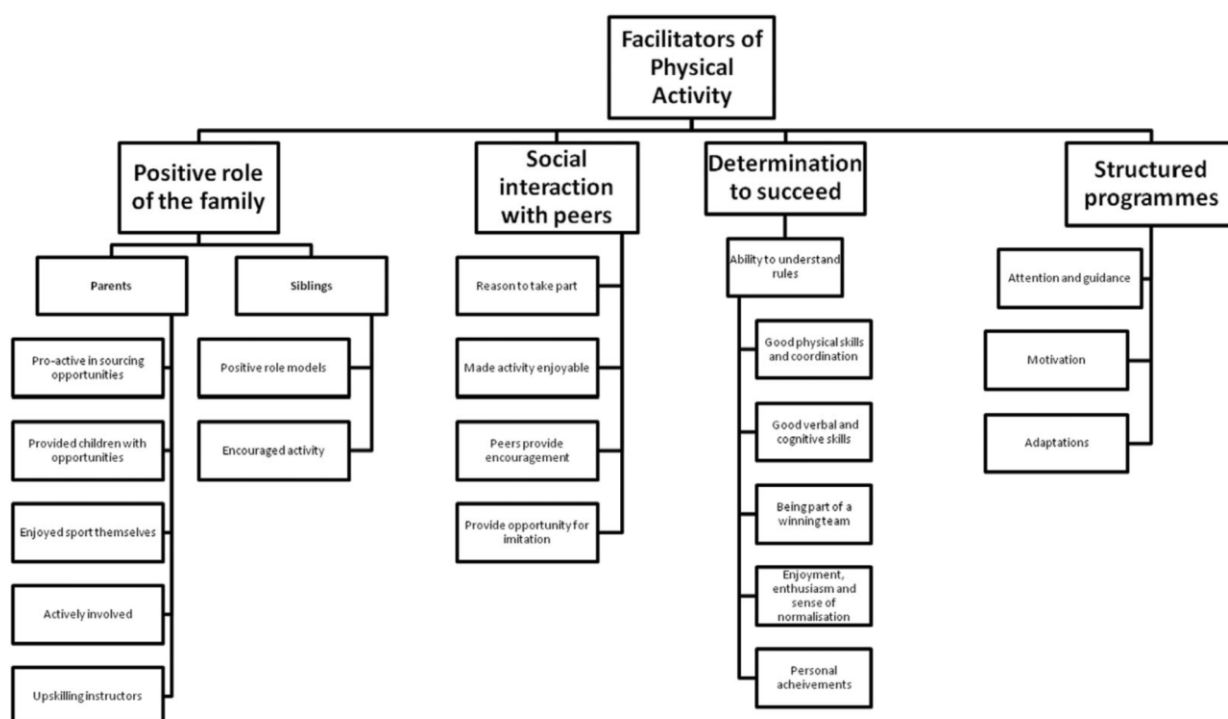
### **Down Syndrome**

Around 15% to 20% of people with intellectual disabilities have Down Syndrome (Esposito et al., 2012). Furthermore, research studies show that children with Down Syndrome (DS) have lower muscle strength, levels of motor development, and cardiovascular fitness (Nehring, 2010). In addition, children, and youth with Down Syndrome (DS) display a very stable pattern of physical inactivity, which gets worse with age (Ulrich et al., 2011). Exercise programs have the prospective to positively affect the overall health of adults with Down Syndrome (DS), thereby increasing the quality of life and years of healthy life for these individuals (Barnhart & Connolly, 2007). Moreover, exercise and nutrition-based interventions are important in preventing and reducing excess weight gain, but interventions should be individually tailored to the child with Down Syndrome (Murray & Ryan-Krause, 2010).

In addition, many kids with Down Syndrome do not get the necessary amount of exercise every day. In 2011, Dr. Nora Shields and Dr. Michael Barr, professors at La Trobe University conducted a study in Melbourne, Australia to determine the facilitators associated with physical activity for children with Down Syndrome. Twenty parents (16 mothers and 4 fathers) of

children with Down Syndrome aged between 2 and 17 years participated in 18 in-depth interviews to learn more about the variables that encourage their kids to participate in physical exercise. A local disability organization in Australia that supports families and individuals with Down Syndrome were recruited to be participants in the study. The two researchers independently categorized and thematically analyzed the interviews after they had been recorded, transcribed, and independently analyzed. The findings of this study determined and outlined facilitators of physical activity for children with Down Syndrome, which are listed below in Figure 1. Moreover, the findings emphasize the significance of families in deciding the level of physical activity that kids with Down Syndrome engage in, as well as the potential impact of common Down Syndrome traits on leading an active lifestyle. Furthermore, by putting these tactics into practice, Physical Education (PE) teachers may inspire kids with Down Syndrome to engage in physical activity more frequently (Barr & Shields, 2011).

Table 2: *Facilitators of Physical Activity for Children with Down Syndrome*



In addition, when compared to kids without Down Syndrome, children with Down Syndrome (DS) frequently lag in achieving motor milestones including walking, kicking, jumping, and throwing (Fidler, 2005). Moreover, Fidler (2005) makes the specific recommendation that parents and Adapted Physical Education (APE) teachers be included in motor skill intervention approaches to lay a solid foundation at a young age. Notwithstanding, motor delays in early childhood act as one barrier to physical activity participation for individuals with Down Syndrome (Esposito et al., 2012). Additionally, through a range of teaching and learning experiences, successful features include demystifying preconceptions and raising awareness of disabilities and barriers (Grenier, Seaman & DiFloures, 2017).

Finally, individuals with Down Syndrome, lately, have been redefining what is humanly possible. For example, this August in Milwaukee, 15-year-old Caleb Prewitt from Jacksonville, Florida, became the first person with Down Syndrome to compete at the Age Group National Championships. Caleb Prewitt is an ambassador for the USA Triathlon Foundation, and he also competed at the Zone3 Youth & Junior Nationals in West Chester, Ohio, earlier this summer (Meyers, 2022). His idol is Chris Nikic, who in 2020 captivated and inspired the world when he became the first person with Down Syndrome to complete a full Ironman triathlon (Meyers, 2022). An Ironman triathlon consists of a 2.4 mile swim, 112 mile bike, and finishes with a marathon (26.2 mile) run.

### **Legal: APE Student Rights Issues**

Since the 1950s, special education in the United States has used a segregation approach to teach kids with various learning problems and physical impairments that could cause learning difficulties in regular classroom settings. However, the 1975 Public Law 94-142 Education for All Handicapped Act required that all handicapped children aged 3-21 receive free education in

both public/private schools in the “least restrictive” environment. In addition, Section 504 of the Rehabilitation Act specifically referred to Physical Education (PE)/sport when it said that all handicapped persons must be allowed to participate in all school programs, and that especially PE/sport could not discriminate, must provide equal opportunities to participate, and could offer separate opportunity (only in documented cases).

The law required Individual Education Programs (IEP’s) outlining specific pathways to accomplish these mandates but provided no additional support staff for Physical Education (PE) teachers/coaches who were additionally burdened with creating these IEPs (Anderson, 1999). In addition, Physical Education (PE) teachers were faced with the challenging task of implementing these programs while also giving rise to numerous lawsuits. The mainstreaming of students with disabilities under the legislative mandate of IDEA in Physical Education (PE) and various judicial cases establishing exact methods of achieving mainstreaming presented educators with this challenge (Anderson, 1999).

Many thought the law idealistic, i.e., when any “special” child is inserted into a “regular” Physical Education (PE) class or sport team, the class becomes different because additional arrangements must be made, which takes extra time, money, personnel, and becomes an “open invitation” to legal problems (Anderson, 1999). For example, what about the safety of the handicapped kids when playing with “normal” children, e.g., how does the handicapped kid wearing a metal prosthesis artificial limb keep “pace” in a “regular” Physical Education (PE) class (Quirk, 1999). Moreover, what about the safety of the “normal” kids should the metal prosthesis severely cut the leg of a “normal” kid, e.g., in a 2004 case [Williams vs Wakefield Basketball Assn (MA)], a federal judge barred 7-year-old wheelchair bound plaintiff Williams

from playing with “regular” kids, ruling that the wheelchair was a safety risk (Appenzeller, 2000).

Even when placed in a “regular” Physical Education (PE) class, possible liability remains; e.g., in *Alban vs Harford County Schools* (MD, 1985), an 8th grade mentally handicapped student, as per her IEP, was placed in a “regular” PE class, received serious injury, and her parents sued, saying she never should have been placed in a “regular” PE class, yet the parents had OK’ed and signed their daughter’s IEP insisting that she be in a “regular” PE class (Quirk, 1999). In addition, what does a coach do when a handicapped kid wants to play a sport, but participation puts the coach in legal peril; e.g., in *Pool vs South Plainfield School* (NJ, 1986), plaintiff Pool was born with but one kidney, wanted to wrestle, but the coach, fearing a lawsuit should the boy hurt his only kidney, refused him on the team, so the boy sued, won, and was allowed to wrestle, albeit the court did say neither the school nor the coach could be held liable (Appenzeller, 2000).

With today’s obesity epidemic, is that a “handicap?”; e.g., in *Holloman vs Friedman School* (NY, 1997) a severely obese student tripped in a hole on the playground, fell, damaged her knee, sued for lack of supervision and failure-to-wary, and won \$275,000 (Quirk, 1999). How many Physical Education (PE) teachers are needed in classes with special handicapped students; e.g., in *Childless vs Madison County* (TN, 1989), severely mentally handicapped plaintiff Childless, escorted by a PE teacher, went to a swimming pool to practice for Special Olympics, but when the teacher momentarily turned her attention to another mentally handicapped student, Childless went to the bottom of the pool, had to have CPR, and the teacher was found negligent (Appenzeller, 2000). Are Physical Education (PE) teachers negligent if they discipline or restrain special students? For example, many schools now require courses, clinics

and certifications in student-restraining. Some schools in the state of New Hampshire utilize the Crisis Prevention Institute (CPI) that offers educators certification in how to combine advanced restrictive physical skills for high-risk scenarios such as those that require floor intervention and verbal intervention.

Then you have cases where disabilities emerge; e.g., in *Knapp vs Northwestern University* (IL, 1996), highly recruited basketball star Knapp signed with Northwestern, but during her senior high school year, suffered cardiac arrest, had to be resuscitated by paramedics, and later had a heart defibrillator surgically implanted; the university honored her scholarship offer, but refused to let her play, so she sued under Section 504 of the Rehabilitation Act, but the jury supported Northwestern, citing as “substantial” the chance of recurrence and/or death (Appenzeller, 2000). Therefore, Physical Education (PE) teachers should never forget that they are always responsible for their own actions, and to that end, yes, they must use foresight, caution, wisdom, and common sense, but they cannot be frightened.

### **Review of Current Literature and Theoretical Framework**

The theoretical framework for this dissertation and qualitative research design was derived from Piaget’s constructivism. According to Creswell (2013) constructivists believe that individuals seek understanding of the world in which they live and work. Furthermore, teachers using constructivist pedagogies spend time mediating activity rather than directly explaining content (Wright et al., 2010). Jean Piaget’s genetic epistemology concentrates on the individual in learning (Pass, 2004). This is important because genetic epistemologists seek knowledge that is verifiable. According to Piaget (1969), “The goal of education is not to increase the amount of knowledge but to create the possibilities for a child to invent and discover (p. 83).” As a cognitive constructivist, Piaget believes children develop through their own interaction with their

social and natural environments (Joubert & Harrison, 2021). Piaget focused on the process of the development of skills by tracing the micro-historical changes in trajectories of emerging patterns of interactions (Carpendale & Wallbridge, 2018).

The fundamental theoretical commitment of constructivism is that there are qualitative changes within representational systems throughout the course of development (Carey et al., 2015). Moreover, assimilation and accommodation are two functional processes that have an impact on functional acquisition. Therefore, constructivist teaching strategies have a great effect in the classroom both cognitively and socially for the student (Powell & Kalina, 2009). In addition, a practical, stage-based model of early cognitive and physical development that is related to the assimilation of socialized behaviors was incorporated by Piaget. One of the many physical and mental processes that are functionally influenced by teaching Adapted Physical Education (APE) is the development of social skills.

Culture and context influence the way that learners develop ways of making sense of the world and how to categorize opinion from fact, all of which is colored by the learner's perception, which is so entwined with understanding that we must conclude that there is no one objective truth (Denzin & Lincoln, 2003). Because social constructionists believe in the constructed nature of knowledge through the daily interactions between people, social interactions, languages, and movement are of great interest in the general physical education setting (Grenier, 2007).

In addition, child developmentalists have been studying how the brain works since the early nineteenth century. A considerable amount of knowledge about how school-aged children learn comes from Piaget. These beliefs are being documented and supported by brain-based research. Movement is required to improve learning as Caterino (1999) cites clinical data



suggesting physical activity, and more specifically, physical education taught in schools, stimulates brain function, increases focus and memory, and so improves academic performance. This leads to the conclusion that including physical education into the regular classroom curriculum, especially for students with disabilities, not only boosts brain activity and function, but it also allows for more meaningful learning.

### **Gaps in Literature Related to Focus of Practice**

Adapted Physical Education (APE) is critical in teaching Physical Education (PE) to students with specific needs (Prakosha et al., 2018). However, P.C. Sweet from the University of Southern California is the only researcher to study Physical Education (PE) equipment in the state of New Hampshire in 1941. This study was an evaluation of health and physical education programs in public secondary schools in New Hampshire and did not include anything related to Adapted Physical Education (APE).

Furthermore, the effectiveness of teachers, productivity, and experience may rely on the environment in which the experience is obtained (Bastian & Janda, 2018). However, the lived experiences of Adapted Physical Education (APE) teachers in rural New Hampshire public schools have not been explored in previous research. Subsequently, the physical fitness development goal is concerned with a program of activities that develops and maintains an individual's power through the development of the body's numerous organic systems (Krotee & Bucher, 2007). Multiple studies have confirmed that health benefits are associated with physical activity, including cardiovascular and muscular fitness, bone health, psychosocial outcomes, and cognitive and brain health (Strong et al., 2005). The basic idea is that students who are cognitively engaged in the value and necessity of specific game tactics and skills in Physical

Education (PE) class, will be more driven to improve them to improve their game performance (Lodewyk & Bracco, 2018).

Furthermore, Block (2015) suggests that physical literacy assessment in Adapted Physical Education (APE) is always comparable to formative assessment in that it informs the assessor where the student is on specific aspects of her or his physical literacy journey. Mercier, Donovan & Gibbone (2020) suggests that teaching healthy living habits in Physical Education (PE), especially at a young age, is clearly a worthy use of public expenditures. Moreover, according to Columnia et al. (2013), “There is a need to provide and disseminate information about existing programs that promote physical activity for children with hearing and visual impairments (p. 210).”

In addition, because hearing and visual impairments determines the qualitative uniqueness of a child’s physical and mental development at the primary school level, this should be considered when planning the Adapted Physical Education (APE) process for children with hearing impairments and supplementing it with organizational and pedagogical conditions that will increase its effectiveness (Shatunov & Martynova, 2018). According to Fidler et al. (2003), while several parents just requested more adapted physical education, one parent specifically requested that Adapted Physical Education (APE) teachers be more sensitive to emotional difficulties. Regardless, Adapted Physical Education (APE) teachers must recognize that what they do, or do not do, may have a long-term influence on kids if they are to provide a safe and encouraging atmosphere (Landolfi, 2014).

### **Summary of Scholarly Review**

According to the scholarly review, Physical Education (PE) plays a crucial role in the educational process. Particularly Adapted Physical Education (APE) programs that support the

growth of health through a range of movement activities, skills, and information required to encourage lifelong fitness, social collaboration, and a healthy well-being (Lodewyk & Bracco, 2018). There are also substantial academic and emotional advantages. Students gain teamwork skills while also learning the values of sportsmanship and fair play; moreover, students are taught in effective Adapted Physical Education (APE) programs that show tolerance and respect for others is expected of them as a positive contributor (Landolfi, 2014). In certain circumstances, grades in Adapted Physical Education (APE) are determined by preparation, effort, application, improvement, and skill (Sherrill, 2004).

Early sensory-motor development served as the foundation for the stages of development that Piaget introduced. In addition, constructivism requires a various postmodernist ontology and an interpretivist epistemology in which the truth seeker and responder co-create truth (Schwandt, 2003). Furthermore, constructivism advocates the premise that the reality we live in is not always obvious, and that people actively shape how they see their daily lives (Saldaña, 2021). In education, constructivism, sometimes known as cognitive constructivism, is a philosophy that promotes the development of knowledge through learning experiences (Fosnot, 2013).

In light of previous Adapted Physical Education (APE) research, it is obvious that the obstacles of inclusion, mainstreaming, class size, administrative support, inadequate equipment, and funding are not limited to a single school or location but affect Physical Education (PE) teachers across the country. Furthermore, research supports the use of Adapted Physical Education (APE) in early intervention programming to meet the unique motor development needs of children with Down Syndrome. Moreover, the emphasis on the learning process and the usage of adaptations become crucial components of the educational process in Physical Education (PE). Therefore, this study aimed to address a gap in the past and current literature on

the problems and barriers that Physical Education (PE) teachers face when incorporating students with disabilities into general physical education (GPE).

## **Section Four: Contribution to Research**

### **Introduction to the Contribution to Research**

This study examined the actual lived experiences of Physical Education (PE) teachers working with students that have disabilities, particularly in rural New Hampshire public schools serving grades K through 12. The findings of this study contribute to the body of knowledge on Adapted Physical Education (APE) by illuminating the difficulties and obstacles that instructors have when including students with disabilities in general physical education classes. Future researchers, teachers of Physical Education (PE), school administrators, the New Hampshire Department of Education (NHDOE), and parents of children with disabilities may find its conclusions and recommendations useful. In addition, the conclusions offered here combine many elements of the research project. Moreover, this section's key components include the participants' profiles, research questions, observation field notes and pictures, interviews, and gathered documents and artifacts. Therefore, they all set the researcher up for inferences based on the information provided to provide a meaningful contribution to research.

### **Sampling Procedures**

For this research study, the choice of participants was New Hampshire Physical Education (PE) teachers in rural public schools (K-12). Randomized sampling was conducted to identify participants. In the random number method, the researcher first created a chart which listed all the rural cities in New Hampshire alphabetically. The researcher then assigned every individual town and village a number. Using the random number generator, the researcher randomly picked a subset of the population. Specifically, the researcher used the random number function (RAND) in Microsoft Excel to generate the set of random numbers. In addition, Microsoft Excel uses the Mersenne Twister algorithm to generate random numbers.

Table 3: *Random Number Function (RAND) - Mersenne Twister Algorithm*

$$(\text{trunc}_v(x_i), \text{trunc}_v(x_{i+1}), \dots, \text{trunc}_v(x_{i+k-1})) \quad (0 \leq i < P)$$

Initially, the researcher contacted the first fifteen school districts to solicit participants for the study. Only two Physical Education (PE) teachers agreed to participate in the study.

Therefore, the researcher generated the next set of randomized schools from number sixteen to twenty-five to find more participants for the study. The second round of invitations resulted in six additional participants that agreed to be in the study. The researcher, the third time generating the randomized list, then contacted potential participants from schools numbered twenty-six to number fifty. During this third attempt to find potential participants, the researcher was able to secure six additional participants for a total of fourteen participants for the study.

The participants were elementary, middle, and high school Physical Education (PE) teachers from rural New Hampshire public schools. The teaching experience of the participants ranged from 3 years to over 35 years. There was a total of 14 participants. There are 237 years of combined teaching experience in Physical Education (PE) by the 14 participants in this study. Furthermore, 9 out of the 14 participants in this study had more than 10 years of teaching experience in Physical Education (PE). Participants shared some of the same challenges and barriers in Physical Education (PE) when including students with disabilities in their general physical education classes. All the participants in this study identified with Caucasian/White for their race and ethnicity. In addition, one of the participants in this study completed their teacher certification and college degree in Canada, which subsequently only required only one class in Adapted Physical Education (APE). Lastly, none of the participants in this study have earned their Certified Adapted Physical Educators (CAPE) license and endorsement. There are only 14 states that require Physical Education (PE) teachers to become CAPE certified to work with

students that have disabilities in PE classes. New Hampshire is not one of the 14 states that requires CAPE certification for PE teachers to work with students that have special needs.

### **Participant's Profiles**

#### ***Teacher 1 - Participant A***

Participant A is a Caucasian female. For the last 8 years, she has been working at the same Elementary/Middle School in southern New Hampshire that serves students in grades K through 8. In addition, she has been serving as the Athletic Director for the last four years. Moreover, she has several years of experience coaching student-athletes with physical limitations and behavioral issues such as Social Emotional Learning (SEL) in Basketball, Soccer, and Track & Field. She completed her bachelor's degree in Physical Education and Health Education at Plymouth State University.

#### ***Teacher 2 - Participant B***

Participant B is a Caucasian female. She is a Middle/High School Physical Education (PE) teacher in northern New Hampshire that serves students in grades 6 through 12. In addition, she is currently serving as the Athletic Director. She earned her Bachelor of Science in Kinesiology Pedagogy with a focus in adaptive PE at the University of New Hampshire, and Master of Business Administration (MBA) in Sport Management and certification in Athletic Administration at Southern New Hampshire University. She has 6 years of experience teaching Physical Education (PE). She has extensive coaching experience in Field Hockey and Track & Field.

#### ***Teacher 3 - Participant C***

Participant C is a Caucasian male Physical Education (PE) teacher at an Elementary school and works with students in grades (K-5) in central New Hampshire. He graduated from

Boston University having earned his Bachelor of Science degree in Human Movement Education and certification in Physical Education and Health. In addition, he completed his Master of Arts degree in Educational Leadership at Boston University.

Furthermore, this participant has an extensive background in coaching and working with student-athletes that have physical limitations and disabilities. He has extensive experience coaching wrestling, tennis, track and field, and weightlifting. He has 20 years of experience teaching Elementary (K-5) Physical Education in central New Hampshire.

#### *Teacher 4 - **Participant D***

Participant D is a Caucasian male Physical Education (PE) teacher at an Elementary school in southeast New Hampshire for grades K-5. He is currently in his 34th year of teaching, and has experience working as an Elementary, Middle, and High School Physical Education (PE) teacher in New Hampshire. He graduated from Plymouth State College with his bachelor's degree in Physical Education.

#### *Teacher 5 - **Participant E***

Participant E is a Caucasian male. He teaches Physical Education (PE) at a middle school, grades 6 through 8 in central New Hampshire. He has 27 years of experience teaching Physical Education (PE) and has been serving as the school's Athletic Director for the last 12 years. He has experience coaching Hockey, Soccer, Basketball, Wrestling, and Baseball. In addition, he started the Unified Sports program at his school. The unified sports program works with students that have disabilities in athletic competitions for sports such as Track and Field, Basketball, and Soccer. He completed his bachelor's degree at Springfield College, and his master's degree at Plymouth State University in Athletic Administration.

#### *Teacher 6 - **Participant F***



Participant F is a Caucasian male. He is a certified Health Education and Physical Education teacher in New Hampshire. He teaches at a high school, grades 9 through 12 in central New Hampshire. He completed his bachelor's degree in Secondary Education at the University of New Hampshire (UNH), and master's degree at UNH in Kinesiology Pedagogy. He has been coaching Track and Field at his school for the last 3 years. In addition, he is a certified strength and conditioning specialist through the National Strength and Conditioning Association. He has 7 years of teaching experience in Physical Education (PE) and has been at his current school for the last 4 years as the Health Education and Physical Education (PE) teacher. He was previously a middle school Physical Education (PE) teacher for 3 years; however, he took a 10-year break in between teaching at the middle school and his current high school due to a traumatic injury. In 2007, he broke his neck and back, giving him a T3, chest level spinal cord injury, which left him paralyzed from the chest down. He uses a wheelchair to get around and to teach Physical Education (PE). He is quite possibly the only full-time Physical Education (PE) teacher in the country that uses a wheelchair.

*Teacher 7 - Participant G*

Participant G is a Caucasian male. He graduated with his Bachelor of Science from the University of New Hampshire (UNH) in Kinesiology Pedagogy. He is currently in his 5th year teaching Physical Education at an Elementary School, grades K through 6 in Central New Hampshire. He has been teaching Physical Education at the same school for the last 5 years and does not have any teaching experience prior to this. He also coaches Basketball, Soccer, and Tennis at the middle school and high school level.

*Teacher 8 - Participant H*

Participant H is a Caucasian female. She is a certified Physical Education and Health Education teacher in New Hampshire and teaches at a middle school in central New Hampshire for grades 6 through 8. She completed her bachelor's degree in Physical Education & Health Education at Plymouth State University and is currently pursuing her Master of Arts in Education with a focus in Trauma and Resilience at Concordia of St. Paul. Moreover, she has completed an additional 15 credit hours of graduate level coursework in Education. She has 11 years of teaching experience in Physical Education, 7 years of experience coaching Soccer, and 8 years of experience coaching Basketball.

*Teacher 9 - **Participant I***

Participant I is a Caucasian male. He teaches middle school Physical Education for grades 6 through 8 in western New Hampshire. He graduated from the University of New Hampshire (UNH) with his Bachelor of Science in Kinesiology/Pedagogy, and he completed his Master of Arts in Teaching Secondary Education at UNH. He worked at an elementary school from 1998-1999 and has been working at his current school since 1999 (the last 23 years). In addition, he has experience coaching Swimming, Track and Field, Basketball, and Soccer.

*Teacher 10 - **Participant J***

Participant J is a Caucasian female. She teaches middle and high school Physical Education (PE) at a western New Hampshire school for grades 6 through 12. In addition, she teaches middle school and high school Health and Wellness. She coaches soccer, basketball, and softball. She earned her Associates degree in Sports Fitness with a concentration in Physical Education from Dean College, and bachelor's degree from New England College in Kinesiology with a concentration in teaching content. She is currently working on her master's degree in health education at Plymouth State University. She has 3 years of experience teaching and

coaching at her current school. Prior to working in public education, she coached college softball and soccer for 5 years.

*Teacher 11 - **Participant K***

Participant K is a Caucasian female. She works at an Elementary School in Eastern New Hampshire for grades K-4. She has 26 years of experience teaching Physical Education (PE). She graduated from the University of New Brunswick, Fredericton in Canada with her associate degree in Biology and History and bachelor's degree in Physical Education (PE). She has 26 years teaching Physical Education (PE) at the elementary school. She also has experience coaching Unified Sports such as Bowling.

*Teacher 12 - **Participant L***

Participant L is a Caucasian male. He is a Physical Education (PE) teacher at a Middle/High School in Southeast New Hampshire for grades 6-12. He earned his Bachelor of Science in Physical Education: Sports Medicine from Keene State College and has completed 15 credit hours towards his master's degree in Athletic Management from American Public University. He started teaching Physical Education (PE) in 1987 at Spaulding Youth Center and Pangburn School for grades 1-8. He has been working in his current school as the Physical Education (PE) teacher since 1995, and has served as the Athletic Director, Educational Leadership Team, and Unified Arts Department Chairperson over the last 27 years. He has 35 years of experience working as a Physical Education (PE) teacher.

*Teacher 13 - **Participant M***

Participant M is a Caucasian female. She is a High School Physical Education (PE) teacher in the White Mountains Region of New Hampshire that serves students grades 9 through 12. She graduated with her Bachelor of Science in Physical Education and Health Education, and

master's degree in athletic administration. In addition, she is currently certified in New Hampshire to teach Physical Education and Health Education. She has 15 years of experience teaching Physical Education (PE).

*Teacher 14 - Participant N*

Participant N is a Caucasian male. He is a Physical Education (PE) teacher at an Elementary School in Central New Hampshire for grades K-5. He completed his master's degree in Physical Education at New England College, and Bachelor of Science degree in Education with a concentration in Kinesiology at New England College. He has 16 years of experience teaching Physical Education. He has taught PE at the elementary school for 4 years, and prior to that he was the PE teacher at a middle school grade level 6-8 for 12 years. He has over a decade of experience coaching Basketball, and he currently serves on a couple of leadership committees at his current school.

During the interview procedure, each participant's demographic data was collected. This procedure supports Seidman's (2019) expectation that the participants' backgrounds would be revealed. The researcher can better understand each Physical Education (PE) teacher by using their backgrounds, which are interesting in this study on challenges and barriers. The demographics for each participant are listed below in Table 4.

Table 4: *Demographics*

Participant	Gender	Grade Level	Experience
1	Female	Elementary/Middle (K-8)	8 Years
2	Female	Middle/High School (6-12)	6 Years
3	Male	Elementary School (K-5)	20 Years
4	Male	Elementary School (K-5)	34 Years
5	Male	Middle School (6-8)	27 Years

6	Male	High School (9-12)	7 Years
7	Male	Elementary School (K-5)	5 Years
8	Female	Middle School (6-8)	11 Years
9	Male	Middle School (6-8)	24 Years
10	Female	Middle/High School (6-12)	3 Years
11	Female	Elementary School (K-4)	26 Years
12	Male	Middle/High School (6-12)	35 Years
13	Female	High School (9-12)	15 Years
14	Male	Elementary School (K-5)	16 Years

### **Results/Findings of the Research Study**

This phenomenological study focused on the perspectives of Physical Education (PE) teachers, grades K-12 in rural New Hampshire schools that work with students that have disabilities. In addition, the lived experiences of 14 Physical Education (PE) teachers, grades K through 12, working in rural public schools in New Hampshire were examined utilizing qualitative research methods. Moreover, the researcher had a significant range of participants to work with when examining the lived experiences of Physical Education (PE) teachers in elementary, middle, and high schools from various districts in New Hampshire. These participants all operated under various teaching paradigms. There was a significant gap in the research that currently exists in Physical Education (PE) and Adapted Physical Education (APE), especially in rural New Hampshire public schools.

The interview process for this study was based on Seidman's (2019) research, which emphasizes that personal experiences with a notion or idea are more valuable than facts. The researcher was able to dive into the perceptions of Physical Education (PE) teachers through a

skillfully designed and delivered interview method. In addition, the interviews for this study were done using open-ended questions in accordance with Seidman's (2019) framework for in-depth interviewing, giving participants some freedom to explore the subject from their own points of view.

Moreover, to respect the participants' time constraints, Seidman's (2019) Three Interviews Series was performed in a modified two interview style. The first interview was in-person and took place at the participants' school. The second interview was online via Zoom. Furthermore, to satisfy the goals of Seidman's Interviews 1 and 2, as well as to give the researcher and each participant time to establish rapport and paint a true image of the participant's lived experience, the first interview was prolonged, and in most cases, lasted approximately 45 to 55 minutes in duration. In addition, all Physical Education (PE) teacher participants in this study took part in the observation and interview process.

Additionally, the researcher concentrated on the participants' life histories, current life experiences in the Physical Education (PE) classroom, and the meaning of the experiences, and more specifically how they related to the obstacles, challenges, barriers, and difficulties they encounter as physical educators, in keeping with Seidman's (2019) recommendation to respect the series' structure. Moreover, there were at least three days in between each of the two interviews, providing the participant time to reflect on his or her responses and performance. Furthermore, according to Seidman (2019), interview notes should be typed out as quickly as feasible after the interview. In this study, the researcher used his iPhone 12 Pro Max cell phone to record the audio from each interview. The researcher also recorded the video from the second Zoom interview online. The researcher used a back-up recording method with his Transcribe Pen, but it was not needed since all the recordings were successfully documented and saved on

the researcher's iPhone without any problems. Immediately following the conclusion of each interview, the researcher transferred the audio file to the Transcribe app on his iPhone. The researcher purchased 10 hours of transcription time for \$29.99 on the app store. After the interview was transcribed, the researcher immediately emailed the transcribed interview to the participant for member checking purposes and to promote validity within the study. None of the participants in this study recanted any of the statements that were made during the two interviews. After the ninth interview, the researcher ran out of transcribed interview time on the app and paid another \$29.99 for 10 more hours. Between the 14 participants and the two interviews that were conducted, the researcher had over 300 pages of transcribed data from over 17 hours of interview data that was collected.

In addition, between the first and second interview, the researcher performed one observation on each of the 14 participants in this study. Nonparticipant observers, according to Creswell (2013), are those who are present during the activity but are not participating in it. Regardless of the specific lesson that was scheduled for the time, the researcher observed each Physical Education (PE) teacher participant for an entire class period. Creswell (2013) encourages the establishment of precise observation techniques that the researcher will adhere to. The procedure called for keeping a page of observational notes that contained both detailed notes and pictures of the Physical Education (PE) equipment that was used during the observation. According to Creswell (2013), the field notes should allow the researcher to provide a timeline of the event's occurrences as well as notes outlining what is happening and the researcher's observations on what he or she sees. Lastly, during the observations, the researcher listened intently on the Physical Education (PE) teachers' language and words that were used to communicate to students when giving directions, reviewing the rules of the game, and the

process for completing drills and activities during the class period. Lastly, an evaluation of the syllabi and lesson plans for each Physical Education (PE) teacher resulted in the completion of triangulation and the final data collection method.

The three data collection techniques have value individually, but their combined value as layers with “logical connections,” as described by Creswell (2013), is even greater (p. 108). In the end, these connections support a data collection procedure that is rich in diverse qualitative data. In this study, the challenges, and barriers of Physical Education (PE) teachers emerged, and it gave the researcher ample information and data to highlight what PE teachers in New Hampshire are doing well to adapt their curriculum and lessons for students that have special needs.

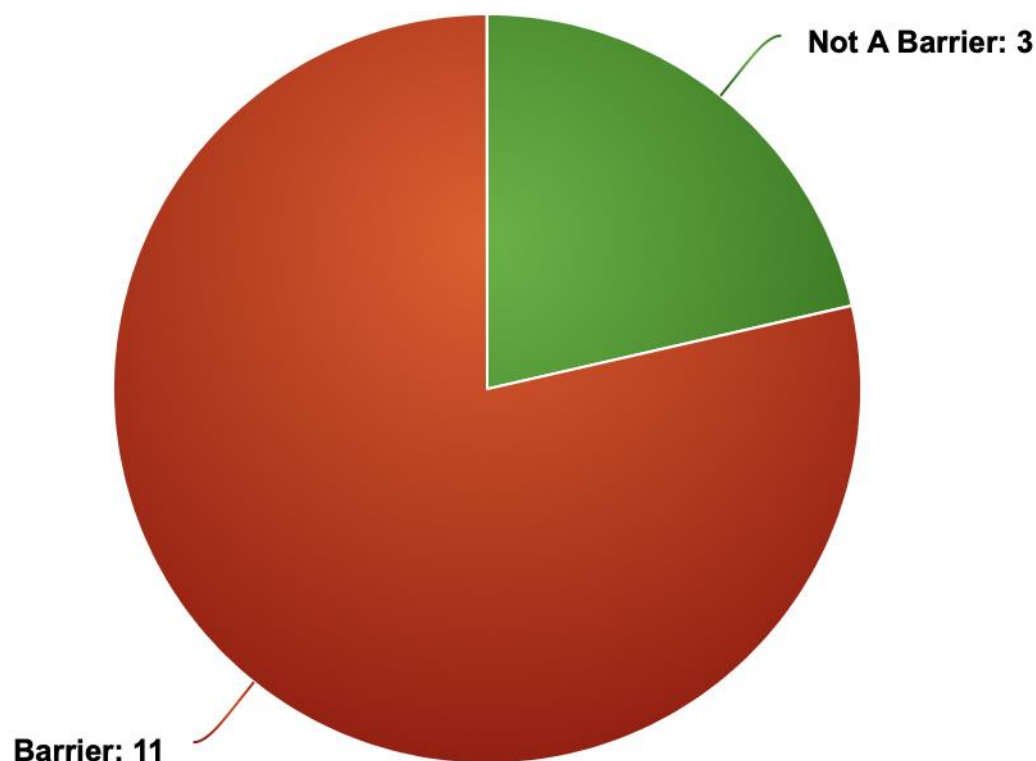
The study results showed that rural public school Physical Education (PE) teachers experienced many of the same barriers and challenges when it comes to including students with disabilities in general physical education classes. The participants in the study reported that some of their barriers and challenges were limited equipment, lack of funding, limited or no paraprofessional help in the classroom, and oversized classes. Physical Education (PE) teachers also reported that managing paraprofessionals, behavior management, and time management are some of their most challenging obstacles. Several of the participants in this study stated that they only could work with students in Physical Education (PE) class once a week, and if there is a holiday on the date they meet those students, it could be up to two weeks without students receiving Physical Education (PE). Only one of the participants in this study reported that they did not have any administrative support at their school.



### **Lack of Paraprofessional Support**

Eleven of the participants in this study cited lack of paraprofessional support as a challenge and barrier when including students with disabilities in General Physical Education (GPE) classes. Specifically, Participant “A” stated that their three biggest barriers were time, paraprofessional support, and non-disabled students that have negative attitudes towards the students in the class that have disabilities. Participant “A” stated, “All right, so I'll be brutally honest. I'm gonna tell you everything, so let's start with lack of para educator support. We'll start there. Um, you know, there's a shortage in the, in the country of all educators right now. Um, so that shortage I know is affecting everyone and not just PE, but we'll start there because it's a fact that, um, there's classes that come in with special needs students with no para educator that might have one in other places, but they don't necessarily always come to PE uh, the para educator with that class or with that kid might get pulled to another classroom somewhere else for the 40 minutes that the kids come to PE.” In addition, Participant “F” made the assertion that the administrators at their school think there is sort of a mindset that students with special needs will just be fine in Physical Education (PE) because it is PE, and they can be active.

In addition, Participant “B” mentioned that on one occasion this school year, a student with special needs ran out of the Physical Education (PE) classroom. The paraprofessional that was in the gym did not notice that the student left the class because they were playing on their cell phone instead of watching, supervising, and helping facilitate and assist the student with special needs during the PE class. Participant “B” also mentioned that a different paraprofessional at their school frequently spends the entire Physical Education (PE) class period checking her email and playing games on her laptop instead of helping.

Figure 1: *Paraprofessional Support*

Moreover, Participant “A” stated that she emphasizes to the students in her class on a regular basis that they need to be accepting of other students in the class that have disabilities and limitations. Participant “A” stated that this can be a struggle as a Physical Education (PE) teacher. She suggested that if she has somebody in class with autism, for example, and nobody wants to be their partner and nobody can get along because they cannot necessarily keep up or play at their level. Therefore, she insists that instead of having kids pick their own teams for games she picks their teams, since some students will not be willing to step up and work with a student that has a disability. Furthermore, Participant “A” uses an app on her iPad that randomly assigns students to two different teams. She stated that she makes it a priority to explain to the student, so that they understand that we must make this change, and still, sometimes the students still do not really get it or understand the reasoning behind being paired and partnered up with a

student that has a disability. As a result, educators today understand the importance of improving students' learning chances through peer work and group projects that promote a deeper understanding of varied learner populations.

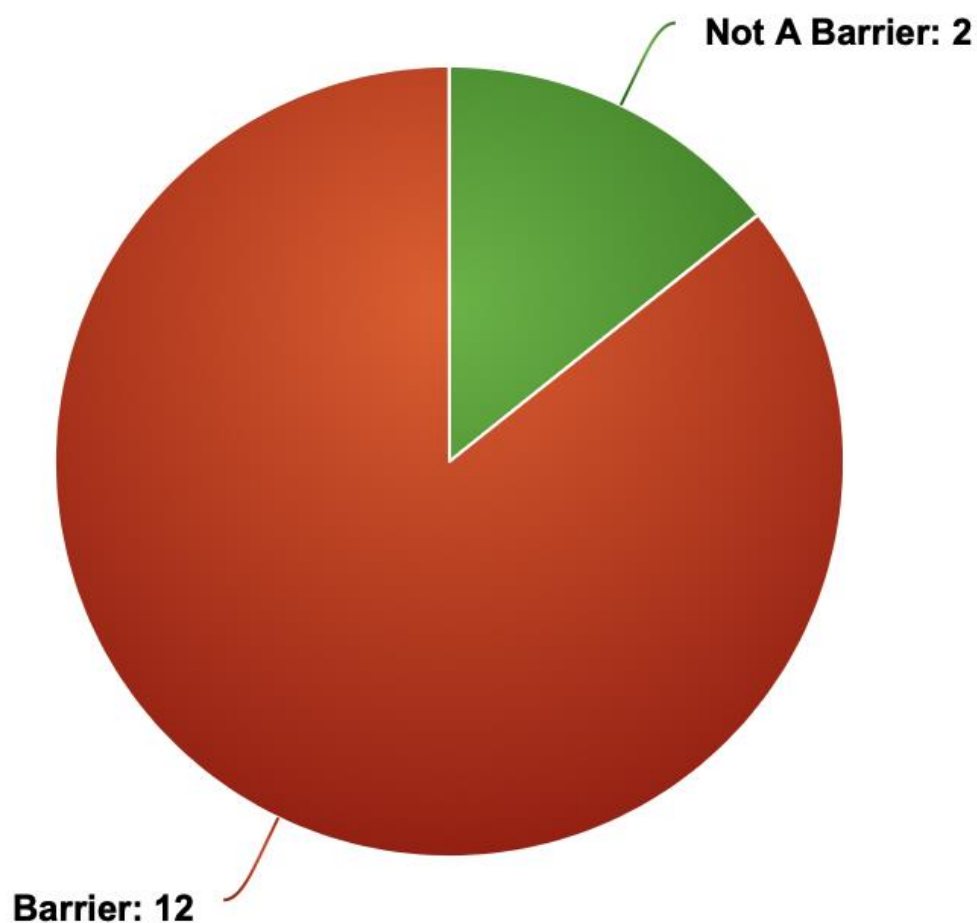
### **Lack of Time**

Participant "A" indicated that her school serves students in grades K through 8. Currently, she is the only Physical Education (PE) teacher at her school. Therefore, students at her school only attend Physical Education (PE) class once a week for 40 minutes. Notwithstanding, that is, if they have a no school day, it could be two weeks that she goes without seeing students or in some cases even longer. Participant "A" recalled an instance a few years ago when she went an entire month without seeing a student because they had snow days and holidays where school was not in session.

On the other hand, Participant "A" stated that she has never had an issue with financial support or funding from her school, has never had a problem attaining the equipment she needs to support students with disabilities in her Physical Education (PE) classes, and physical space either outside or inside has never been a barrier. Participant "A" stated she has used sensory objects such as a soccer ball that lights up with bright colors and makes noises when students kick it. Participant "A" during the observation used a modified hockey stick for the game Spaghetti and Meatballs. The modified hockey stick was shorter and had padding material at the end of it, which students used to strike foam balls out of a hula hoop. The researcher noticed during the observation that Participant "A" engaged with each student in the class equally, and frequently reviewed the expectations, rules, procedures, and emphasized being safe. Participant "A" told the students repeatedly throughout the class period that every student will have an

opportunity to use the modified hockey sticks. Therefore, even non-disabled students were able to use the modified equipment that a student with a disability would have access to.

Figure 2: *Lack of Time*



Twelve out of the fourteen participants in this study cited lack of time as a challenge and barrier when working with students that have disabilities in Physical Education (PE).

“Um, I believe, uh, the number one thing for me is time. There's not enough time in each class and being able to have a separate class for students with special needs, um, we've managed to do it during my prep time and stuff like that just to include our unified class, but I think there should be designated time during the day just for those students, um, to incorporate them in a class. I think too, a lot of the stuff is behavior. A lot of teachers

now, especially myself, are so focused on, you know, keeping those behaviors in line.”  
(Participant G).

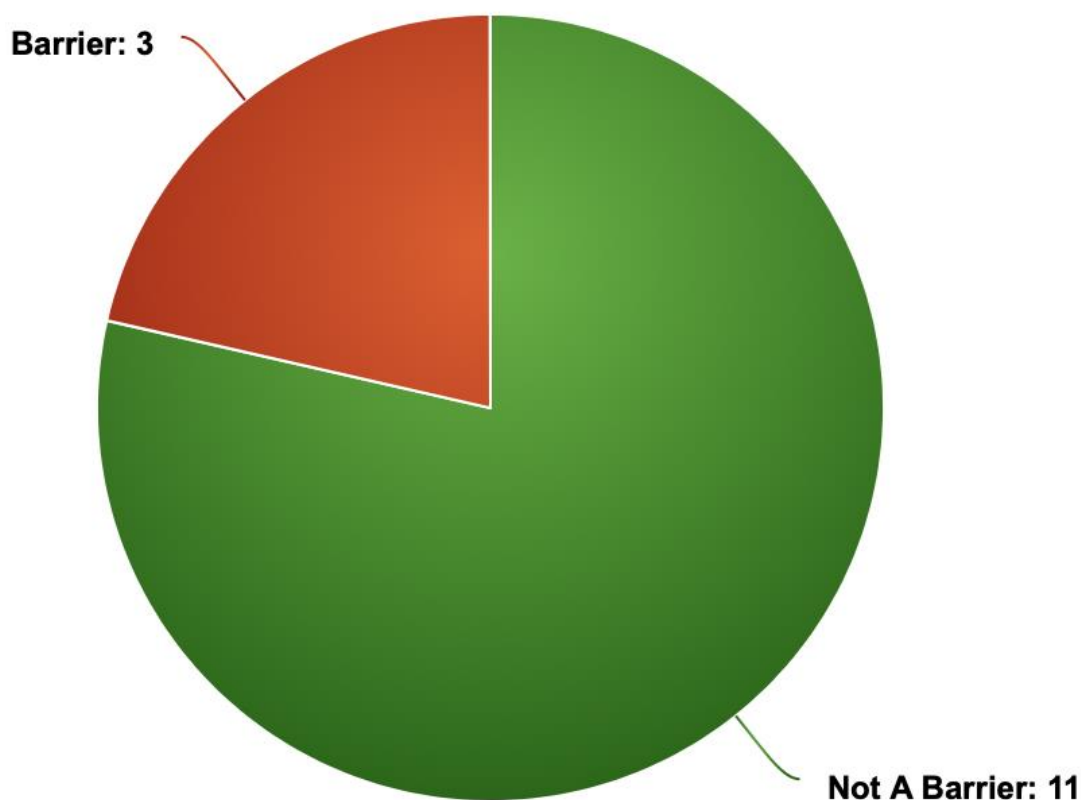
### **Class Size**

Only three out of the fourteen participants in this study cited class size as a challenge and barrier when working with students that have disabilities in Physical Education (PE) classes. The interesting component that participants mentioned regarding class size, was that some of the participants in this study cited that not enough students in the class was a major barrier, compared to having too many students in the class. During the observations, the researcher noticed that the largest class size was approximately 20 students, and the smallest class size was less than 10 students in Physical Education (PE). Moreover, the researched during the observations noticed that Physical Education (PE) teachers efficiently divided groups of students for team games such as Bocce, Basketball, Kickball, and Pillow Polo. Lastly, Participant “H” mentioned that a few years ago, Physical Education (PE) was a “dumping ground” for students that had gaps in their schedule which led to PE class being too big. However, Participant “H” mentioned that this is not the case anymore now that they have a new administrator at their school, and they believe the new Principal values the importance of Physical Education (PE); not viewing it as just an “elective.”

“So I think in terms of equipment and facilities and I'm all about maximum participation, when you have too many students, it's hard to really use that and embrace that. When you have too few, it's like, alright, the equipment's easier obviously, but at the same time participation can be harder cuz you know, team sports or something that would be great when it's 10 on 10 or even eight on eight. If you don't have that, it's now how are we

gonna modify it? Um, I think it's great for individualized attention and obviously getting to know your students a heck a lot more in depth.” (Teacher M).

Figure 3: *Class Size*



### Physical Space

Only one of the participants in this study cited physical space as a challenge and barrier. Another participant in this study said “Yes and no” to physical space being a challenge and barrier because they believed that they had adequate physical space outside; however, not enough physical space inside. They stated physical space inside was a challenge and barrier because the Physical Education (PE) class is a shared space with the cafeteria.

Specifically, the participant stated that physical space inside was a challenge because there was not enough storage for Physical Education (PE) equipment, and the basketball hoops were set at 10 feet, which is too high for elementary school students to shoot a basketball. He

mentioned that the storage space that they do have is being used to store all the folding chairs that are used for ceremonies that take place in the gym such as graduation and awards banquets. Lastly, twelve of the participants in this study stated that physical space was not a challenge or barrier when working with students that have disabilities in Physical Education (PE).

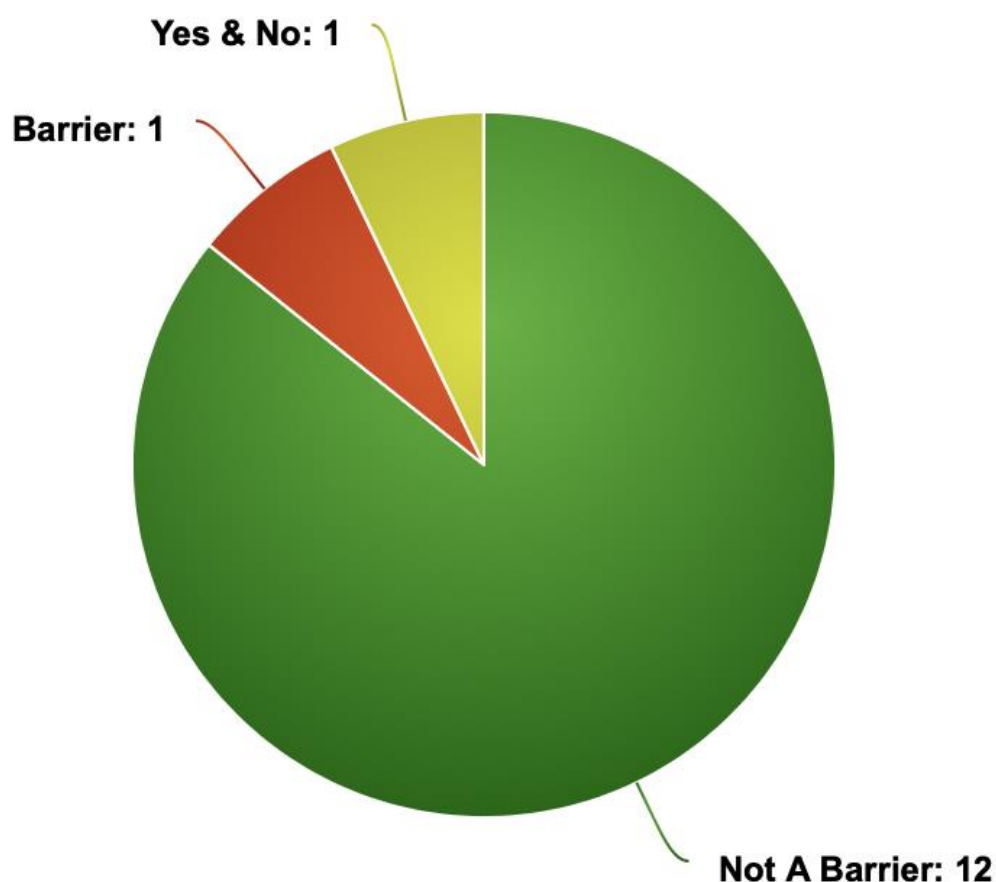
“No, it's not a challenge for us. No. Um, I think our space is very good. We have, uh, plenty of outdoor space when we're able to use it, um, for just weather and, you know, just typical reasons. And our indoor space is, I think, fantastic. Like we have, we have a lot of, we have a nice big open gym space. We don't typically get moved out of it. Um, we don't have to share it with a lunchroom or there's not a lot of reasons that we would have to get moved out of the gym.” (Participant 8).

Moreover, Participant “J” stated that this year, students will participate in a wide variety of physical activities regardless of physical abilities, limitations, or disabilities. As a result of COVID-19, this year she will focus on activities that they are able to do while keeping their social distance. In addition, there will be many fitness tests given throughout the year, which include, the mile run, push-ups, and sit-ups. Students will have the opportunity to learn these workouts, games, and activities, and are encouraged to continue to be physically active outside of the school setting. For example, frisbee, bocce, corn hole, and snowshoeing.

During one of the observations, the Physical Education (PE) teacher was not allowed to use the gym since it already had everything set up for the annual middle school musical and play that the drama club puts on; therefore, she had to take her PE class outside to the soccer fields for class that day. Another participant in this study stated that when their school returned to in-person learning following Covid-19, she had to take her elementary Physical Education (PE)

classes outside everyday at the beginning of the class period for the first ten minutes because the “air had to circulate” before they could use the gym.

Figure 4: *Physical Space*



### Equipment, Funding and Administrative Support

Only one participant in this study reported that lack of equipment and funding are a challenge and barrier at their school when working with students that have disabilities.

Participant “E” mentioned that they work with outside organizations such as Northeast Passage when they need help obtaining equipment. Northeast Passage is an organization that works with adults that have physical disabilities to help promote engagement and participation in recreational and athletic activities. Participant “E” also mentioned that they have Northeast



Passage come to their school once a year and they bring approximately 20 wheelchairs with them so that the students in Physical Education (PE) class can play a game of wheelchair basketball.

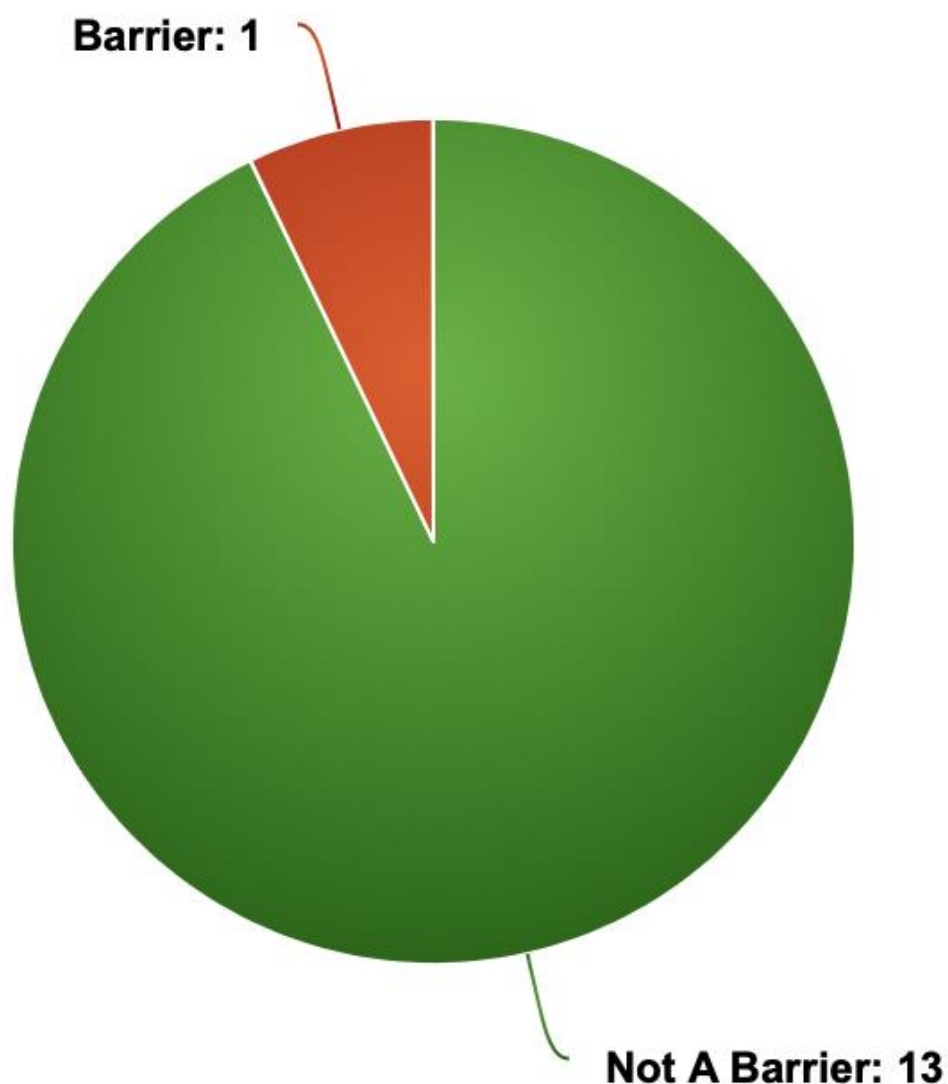
“No, No. I've never had issues with funding and equipment, there's never been something that I'm like, And Special Olympics has been great, um, with funds too, um, with buying us things and things like that. So I, you know, No, I mean, the simple of that is no, it's never been a roadblock for us to do whatever it is that we wanted to do.” (Participant E).

Additionally, only one participant in this study reported that lack of administrative support is a challenge and barrier for them when working with students that have special needs in Physical Education (PE). The one participant that cited lack of administration support as a challenge and barrier said it was because they once had an Adapted Physical Education (APE) class that they taught for the last eight years, and at the beginning of this school year, the administration, which included the Principal and Assistant Principal of the school took it away from him and now those students go to see the Physical Therapist (PT) and Occupational Therapist (OT) at the school for physical activity. One participant stated that their experience with administrative support has been positive at all their previous schools that they have worked at and the school that they are currently teaching Physical Education (PE) at, especially when it comes to working with students that have disabilities and special needs.

“I think it's been really positive. I've been very fortunate in all the schools I've taught of that have, uh, really good administrators, um, people that are great leaders, you know, and supportive of the staff and students. Um, so the principal will come around once in a while and just pop in and jump in a game with the kids for a little while or just kind of be a presence so the kids see her there, um, which is kind of cool to see. Um, what's also

nice too is it's not all the time, you know, some, you know, my old school was a lot bigger, so the administration was present a lot more everywhere.” (Participant 10).

Figure 5: *Equipment, Funding and Administrative Support*



During this study, the researcher during interviews and observations noticed that Physical Education (PE) teachers are empathetic towards their students, which enabled them to connect to them and demonstrate to them that they are aware of their lives outside of school. In addition, it was apparent that Physical Education (PE) teachers take pleasure in what they do and the students they work with are encouraged to continue doing it because it makes them happy.

Participant “A” stated that being able to improve a student’s life is a reward in and of itself.

Ultimately, Physical Education (PE) teachers can give back to others and the community while working under humanistic commitment.

### **Observational Data**

Each Physical Education (PE) teacher in this study was the subject of one classroom observation by the researcher. Nonparticipant observers, according to Creswell (2013), are those who are present during the activity but are not participating in it. Regardless of the specific lesson that was scheduled for the time, the researcher observed each Physical Education (PE) teacher participant for an entire class period. Creswell (2013) advocates for the establishment of precise observation protocols that the researcher is expected to adhere to. The procedures called for maintaining “Observation Field Notes and Pictures” that included both reflective and descriptive notes (see appendix F). According to Creswell (2013), the researcher should be able to provide some chronology to the sequence of events in field notes, as well as provide comments that characterize what is happening and the researcher’s reflection on what he observes. The researcher kept an observational field notes page and gathered supplementary documents and artifacts that closely examined the Physical Education (PE) teachers’ lesson plans, syllabus, and curriculum. The vocabulary, physical movements, physical classroom structure, activity management, and body language of the Physical Education (PE) teacher gave the researcher another way to arrange the experience in the observational notebook.

### **Teacher 1**

When Teacher 1 was observed in her Physical Education (PE) class, she had the students in this class participate in two games and activities. The first game was called, “Toss three and go” and the second game is called, “Spaghetti and Meatballs.” The equipment used for these two

activities included foam balls, hula hoops, and modified hockey sticks made by a company called Flyhouse. The modified hockey sticks have padding on the bottom of the stick and the hockey stick is shorter in length. There were less than 20 students present in this Physical Education (PE) class during the observation.

At the beginning of the class, one of the students was standing and not following directions. The Physical Education (PE) teacher used humor by quoting the Star Wars movie and said, “I’m using the force to have you sit down.” To involve her students in the learning process, and engage students, she spoke in the following ways:

“One, two, three, come over and take a knee.”

“Toss three and go.”

“Give me 5.”

“Wiggle your ears, touch your belly button, wiggle your nose.”

“Freeze.”

“Everyone will get an opportunity to use the hockey sticks.”

Teacher 1 concluded the class period and instructed the students to help put the equipment away by saying the following:

“If I tap you on the head, you will collect the balls.”

“If I tap you on the shoulder, you will collect the hockey sticks.”

“If I tap you on the elbow, you will pick up the hula hoops.”

Throughout the duration of the game, Teacher 1 moved around to each of the spots where the hula hoops and foam balls were located. The teacher worked with students individually on hitting the ball better and more efficiently and effectively throughout the class period.

## **Teacher 2**

The students in this class participated in a 5-minute warm up, followed by the game Scarf Tag. Next, the students played a Juggling Progression game. Teacher 2 planned for the students to play a Plate Spinning game; however, there was not enough time in the class period to do this activity. The class ended with the students participating in a choice of skill to work on. There were less than 15 students present in this class during the observation.

Teacher 2 used the following language to introduce a new “circus” unit and teach a lesson on juggling:

“Eyes on me.”

“Two minutes.”

“Freeze.”

“Everyone spread out.”

“We are going to learn the first things, how to juggle.”

“We are going to start with the scarf that’s in your pocket.”

Teacher 2 helps the student throw two scarfs in the air and practice these skills. The Physical Education (PE) teacher provides advice and suggestions to the students to help them with their juggling progression, stating the following:

“You’re going to toss it into the air and clap your hands once.”

“Catch the scarf before it hits the ground.”

“Pair up.”

Teacher 2 uses the following statement in between activities and games:

“Alright ladies and gentlemen, come over here, group up.”

Teacher 2 was an active participant in the Physical Education (PE) class, she was constantly moving around the gym to different groups and stations to provide feedback, assistance, and advice to the students in the class.

### **Teacher 3**

Teacher 3 begins his Physical Education (PE) class by telling the students that this week the school/PE teacher is doing, bring your parents to PE week. Teacher 3 states that moms, especially, like to play dodgeball against their kids. For this observation and Physical Education class, no parents showed up to participate in PE class with their child. Students played a game called Shark Island. There are less than 20 students present in this Physical Education (PE) class. The Physical Education (PE) teacher sentences were as follows:

“I can accept failure; I cannot accept not trying.”

“Do your best, be nice, and be tough.”

Teacher 3 allows every student in the Physical Education (PE) class to try different positions and roles within the game being played, and states the following:

“Is there anyone that would like to start off the game as a shark?”

“Freeze. Anyone else want to be a shark now?”

“Freeze. I need four new sharks. I know there’s some people that haven’t done it yet.”

The Shark Island game and Physical Education (PE) class ends with Teacher 3 stating:

“Unfortunately, we are out of time, leave all the equipment where it is.”

“Take the balls outside of the hula hoops.”

During this Physical Education (PE) classroom observation in the gym, there is a student in a wheelchair who asks the PE teacher, “If another student tags me, or the wheelchair with the coconut, do I have to go to the corner?” The corner of the gym is the location of the gift shop,

which tagged players need to visit to resume playing the Shark Island game. The Physical Education (PE) teacher says it only counts if they are tagged and tagging the wheelchair does not count.

#### **Teacher 4**

The location for this Physical Education (PE) class is in the cafeteria which the PE teacher uses as the gym. There are less than 10 students in the class. The students play a game called Four Corners Mouse Trap followed by a bean bag tossing game/activity. The Physical Education (PE) teacher used a projection screen to display the physical activities and instructions on how to play Four Corners Mouse Trap.

To begin the game, the Physical Education (PE) teacher tells the class, “Go cheese.” The students perform different exercises and activities at each of the four corners of the gym/cafeteria. The Physical Education (PE) teacher used the following language to communicate to his students in class:

“This is hard.”

“I like how everyone tried hard.”

“While you guys are coming down, sit down in the center of the gym.”

“We’re going to hop, skip, and leap for the next activity.”

“Everyone is going all the way down to the other side of the gym skipping and hopping.”

“Focus on the lesson today.”

“Oh yea, I have more rules.”

The Physical Education (PE) teacher also tried to incorporate common core Math skills into the lesson, and stated, “I have a math question for you. What is three divided by nine?”

At the beginning of the second game/activity the Physical Education (PE) teacher says, “5, 4, 3, 2, 1 hide them.” The PE teacher reminds the students, “You can't put them in your clothing either.” Additionally, the Physical Education (PE) teacher uses the following language during the bean bag toss activity:

“I'm going to show you how to do tracking.”

“This is where you throw the bean bag in one hand and catch it in your other hand.”

“That's called tracking.”

At the end of the bean bag toss activity, the Physical Education (PE) teacher tells the class, “I'm going to give you an extra credit activity.”

“You have to squeeze the bean bag between your feet and jump up.”

“Try to throw the bean bag up in the air with your feet and then catch it.”

### **Teacher 5**

The location for this Physical Education (PE) class observation takes place inside the gym. The PE teacher indicated to the researcher that he usually takes his students outside to participate, but since it is raining outside today, the students will be having class inside the gym. There are less than 20 students in the PE class and there are only 6th grade students in the class. The PE teacher had the students start the class with a physical fitness booklet activity. Next, the students did a warm-up which included jogging and stretching. Following the warm-up, the students in the class voted to play either a kickball or flag football tournament. There is one paraprofessional (assistant teacher) in the class, and there is one Plymouth State University student-teacher in the class that is working to get his internship hours to become a certified PE teacher in the state of New Hampshire. The equipment used for the game Kickball included four hula hoops and one foam ball.



During the observation, Teacher 5 uses the following language at the beginning of the class period to communicate to the students in the class:

“Go to the locker room and drop your stuff off.”

“Let’s try to get this going.”

“This is for safety.”

“Keep stretching, reach with both hands and try to touch your feet.”

“Keep trying.”

“Hold it for 10 seconds.”

When he noticed students talking in the class while he was trying to give directions and review the rules for Kickball, he blew his whistle and said, “I know you can hear me blow the whistle, you need to stop talking.”

Before the Kickball game has started, Teacher 5 assigns each student a number that collates to the team they are going to play on, and says, “One, two, three.”

During the Kickball game, Teacher 5 uses the following language to communicate to the students in the class:

“Who’s playing first base, second base, third base?”

“Good game.”

“You can’t catch a ball once it’s kicked and it hits the wall, it doesn’t count as an out.”

“The kicking order is boy, girl, boy, girl.”

At the end of the class period, PE teacher 5 tells the students to line up behind their captains. The PE teacher has the students go down the line and give “high fives” to the players on the other team. The PE teacher has the students tell each other “Good game” as they leave the

gym and go into the locker room to change for their next class. Teacher 5 tells the observer that he does this at the end of every PE class to help promote good sportsmanship.

### **Teacher 6**

The location for this Physical Education (PE) class observation is inside the gym. During the observation, there are two teachers that are sharing the gym at the beginning and at the end of the class period. The two teachers are the Physical Education (PE) teacher, i.e., Teacher 6, and the Health and Wellness teacher due to PSAT testing. The class began with the students participating in several frisbee throwing and catching drills, followed by playing a frisbee game at the end of the class period. During the frisbee drills, Teacher 6 used the following language to communicate with his students:

“Backhand, step towards your partner.”

“Work on your accuracy.”

“Pair up into groups of two.”

“If you don’t have or want a partner, practice throwing at the wall.”

“Make sure your pointer finger is pointing towards your partner as you are throwing it.”

“Your thumb is on top of the frisbee.”

“Keep trying.”

“Everyone go through the line one more time and we will be done with this activity.”

“It’s a lot of fun.”

During the frisbee game, at the end of the class period, Teacher 6 uses the following language to communicate to his students in PE class:

“Come here really quick.”

“We are going to try, start throwing and catch the frisbee while moving.”

“That was a good one.”

“Nice effort.”

The Physical Education (PE) class period ends as the Health/Wellness teacher enters the gym from having been outside with her students and finishing their fitness walking. The students used the last couple of minutes of the class period to play a frisbee game, change back into their school clothes for the next class, and packed everything up and put away the equipment that was used for the frisbee game, activities, and drills.

### **Teacher 7**

The location for this elementary Physical Education (PE) class is inside the gym. There were less than 15 students in the class. The students in this PE class began with a warm-up activity that included walking, jogging, and stretching. The students also participated in a scooter activity and jump rope game.

Teacher 7 used the following language to communicate to his students in PE class:

“I need all the students to come inside of the basketball court.”

“We are going to stretch.”

“Good job.”

Teacher 7 used a projection screen and rotated through different stretches with a countdown timer set for 15 seconds for each stretch. There were two paraprofessionals (assistant teachers) in the PE class. One of the paraprofessionals began stretching with the students. There were 25 stretches and poses that the students performed after walking their laps around the basketball court. At the end of the stretching routine the PE teacher said, “Great job.”

After the warm-up and stretching drills, Teacher 7 used the following language to communicate to his PE class:

“Can I please have all of the friends sit at the center of the gym, inside of the circle.”

“We are going to use a hula hoop and a scooter for today’s activities.”

Before beginning the scooter activity, Teacher 7 asks the students what they notice about the hula hoop and the scooter. The students respond, “They are both yellow.”

Additionally, Teacher 7 tells his class, “We are going to listen to music, and when the music stops, we are going to rotate students in each of the groups.” After three songs have been played, Teacher 7 says, “We’re going to do our last switch.” A few minutes later, the scooter activity concludes with Teacher 7 saying, “Friends, can you please put the hula hoops and scooters on top of the stage, and then come join me back at the circle in the middle of the gym.”

The PE teacher says, “Raise your hand if you think you met new people today.” Followed by, “That is one of our goals today. Our other goal is to learn and follow the routines for class.” The PE teacher then sets up a jump rope on the ground and asks two students to hold the jump rope, one student at each end. The PE teacher demonstrates how to jump over the jump rope as the students wiggle the jump rope as a “snake” which means the jump rope does not leave the ground. The PE teacher has the students line up single file, and the students one at a time begin jumping over the jump rope “snake” on the ground. At the end of the song, the PE teacher tells the students to lift the jump rope up off the ground slightly, about 1-inch off the ground. The PE teacher shows the students how to step over the jump rope properly. As the students jump, walk and step over the jump rope one at a time, the other students in the class clap and cheer for the students stepping over the jump rope. The PE teacher says, “Good job” followed by instructions to the students holding the jump rope by telling them not to lift the jump rope too high.

At the end of the PE class period, Teacher 7 uses the following language to communicate to his students:

“Great job.”

“Raise your hand if you had fun today.”

“Did you meet someone new today?”

As the class ends, the students leave the gym, and Teacher 7 states, “Thank you. Great job today. See you at lunch.”

### **Teacher 8**

The location for this Physical Education (PE) class is in the gym. There are less than 15 students in the class. The students begin with a warm-up and stretches. The first activity played is called “Brick Guard” and the second activity is the Pacing Test. The class concludes with the students playing the game “KingPin.”

After the students come out of the locker room, they grab their individually assigned pedometer. Teacher 8 used a projection screen to display activities for the students to do for their warm-up and stretches. Some of the warm-up activities include Pacer Widths (Jogging), Jumping Jacks, Leg Drops, Give Fist Bumps to as Many People as you can, Pacer Widths (Skipping), Side Lunge Stretch (right and left side), Waist Twists, and Mountain Climbers. Teacher 8 uses the following language to communicate to her students during the warm-up:

“Make sure you are holding your stretches.”

“Look at the screen to see the next activity.”

“Hold it.”

“Good job stretching.”

After the students completed the warm-up and stretches, Teacher 8 had the students come to the front of the gym near the stage, and she explained the rules for the game “Brick Guard.” Teacher 8 tells the students that the out of bounds lines are the outside of the basketball court. Teacher 8 tells the students that they will be partnered up and one partner has a noodle that can be used for defending. Their partner is going to try and knock over another student's team's foam brick. Teacher 8 tells the class that if they are tagged with a noodle by someone on the other team, they must go back to their foam brick and do 10 jumping jacks. Also, if they get their brick knocked over, they must do 10 jumping jacks. During the Brick Guard game, Teacher 8 uses the following language to communicate to her students:

“You can set up your brick anywhere you would like within the lines.”

“Be kind and courteous.”

“Do not hit other students in the class as hard as you can with the foam noodle.”

As the Brick Guard game concludes, Teacher 8 tells the students to put away their foam noodles and foam bricks. Teacher 8 tells the students to sit back down on the gym floor near the stage. Teacher 8 tells the students that if they get too tired to run, that they need to walk as an active break instead of sitting down on the gym floor.

Teacher 8 then proceeds to tell the class that they are going to do Fitness Testing today. All the students in the class line up on the far side of the gym and begin running towards the other side of the gym. The students continue running from one side of the gym to the other side each time the beeping noise starts. After a couple of minutes, the audio being played over the speaker system says, “End of Level 2.” There were a couple of students that have decided not to continue with the Pacer Fitness test and are now sitting on the ground near the gym’s stage. The Pacer Testing continues for another couple of minutes, and the audio signals, “End of Level 3.”

The audio then states the number 25, which indicates that the students have run to the other side of the gym and back a total of 25 times. A couple of minutes later the audio on the speaker says, “End of Level 4.” At this point there are approximately half of the students continuing to run and the other half have stopped to end their testing and are sitting on the gym floor near the bleachers and the stage. The audio then says, “End of Level 5.” There are now only 5 students remaining as the audio signals, “45.” After a couple of minutes, the audio speaker says, “55” as the beeping continues at a quicker rate, followed by “65” and then “70.” The audio speakers then signal, “End of Level 8.” There is only one female student remaining. A couple of the students in the class begin to cheer on the last remaining student. During the Fitness Test, Teacher 8 uses the following language to communicate to the students in the PE class.

“Good job.”

“Keep working hard.”

“Push yourself.”

“Don’t quit, don’t give up.”

“Keep going.”

“You had two misses; the Pacing Test is now over.”

“Please make sure you tell me your score.”

After all the students in the class have reported their scores to the Physical Education (PE) teacher, she tells the class that the next game they are going to play is called “KingPin.” Teacher 8 explains the rules of the game and reminds the students that the goal of the game is to knock down all the opponents’ bowling cones. Teacher 8 tells the students in the class that each person is allowed to have only one ball in their possession during the game, and that each team can only

pick up balls on their side of the basketball court. Teacher 8 uses the following language to communicate to her students during the KingPin game:

“Game on.”

“Please do not kick the balls.”

“Whose side can you pick up a ball from?”

“If you shoot the ball and make it on the other side it is a jailbreak.”

“If you catch the ball, you can hand it to another player on your team.”

“Jailbreak.”

“It looks like we have a winner.”

“Once the bowling pins have been picked up, we can begin the next game.”

“Red team has won the game.”

“Alright, game over. Put your jerseys back in the storage cage.”

After the last game has ended, the students line up at the front of the gym and turn in their pedometers to the teacher. The students in the class go into the locker room, grab their belongings, and line up at the door to exit the gym. The bell rings, indicating that the class period is over, and the students leave to go to their next class.

### **Teacher 9**

The location for this class is in the gym. There are approximately 20 students in the class. The students begin class with “open gym” and shoot basketballs on their own with the help of a student helper. The first activity being played is a parachute activity and the second activity uses the parachute and is called Sharks and Minnows. The class concludes with the students playing a game with the parachute where they can identify different colors on the parachute and run to the other side underneath the parachute.



Teacher 9 uses the following language at the beginning of the class period to communicate to his students:

“Good morning.”

“Open gym for the first 10 to 15 minutes today.”

Nearly all the students go to the back corner storage closet and grab a basketball. There is one paraprofessional in the class. The paraprofessional sits on the bench and watches the students shoot the basketballs. There are six basketball goals in the gym, and the students decide on their own which basketball hoop to shoot on. The PE teacher tells the researcher that half of the students in this PE class have an IEP and the other half of the students are student helpers that are assigned one-on-one with a student in the class that has a disability. The PE teacher takes attendance as the students shoot basketballs on their own with their assigned student helper partner. The PE teacher tells the researcher that the name of this class is called Unified Sports. Teacher 9 uses the following language to communicate to the students in the class that are shooting the basketballs:

“Try to use both of your hands to shoot the basketball.”

“A couple more minutes, and then we are going to switch.”

“Awesome memory. Good job holding the basketballs when I blow the whistle.”

“Everyone come have a seat in the middle of the gym.”

The students put their basketballs away in the back storage closet where a big metal storage box is located. The students meet in the center/middle of the gym. Teacher 9 uses the following language to communicate to students to inform them about the next game they are going to play in Unified Sports class:

“We are going to do a fun activity today.”

“Raise your hand if this is your first time playing with a parachute.”

Two of the students in the class raise their hands. The students begin unpacking the parachute from the big black bag, and evenly spreading it across the middle of the basketball court.

Teacher 9 uses the following language to communicate to students once the parachute game has begun:

“With your partner, we are going to spread out and open up the parachute.”

“Let’s have everyone grab a handle and shake the parachute up.”

“Alright now, lift way up high, pull it down, lift, use those muscles.

“Lift, pull it down, use those muscles.”

“Shake it out a little bit.”

“What we are going to do next, I’m going to call a color.”

“When I call the color green, you are going to let go of the parachute.”

“Walk under the parachute to the other side.”

One of the paraprofessionals participates in the parachute activity with the students, and the other paraprofessional continues to sit on the bench and is on his cell phone. The first parachute game ends and Teacher 9 uses the following language to communicate to students in the class during the second parachute game:

“Alright, we're going to get really tricky now.”

“I’m going to call two colors now.”

“Make sure we are being safe as we do under the parachute.”

The second parachute game ends, and Teacher 9 uses the following language to communicate to students:

“The next game we are going to play is called Sharks and Minnows.”

“We are not pulling off our shoes.”

“We need to be safe.”

“One last thing before we play, you have to hold the parachute tight.”

Teacher 9 uses the following language to communicate to students as they are playing the third parachute game:

“Once you go under the parachute, you are a shark.”

“One, two, three, let’s go.”

“One little reminder.”

“If you’re still on the other side, make sure you are holding the parachute tight.”

“Everybody up and out of the parachute.”

All the students under the parachute exit from underneath and grab a handle on the outside of the parachute. The students sit on the ground holding the parachute. The student in the wheelchair along with the paraprofessional that is working with them exit the gym. The other paraprofessional is still sitting in the same spot on the bench that they have been sitting at for the entire class period. The PE teacher blows his whistle and uses the following language to communicate to the students in the Unified Sports PE class:

“Let’s get it folded up.”

“Good job today.”

The students work together to fold the parachute back up and put it into the big black storage bag. Once the parachute is put away, Teacher 9 has the students circle up in the middle of the basketball court, and everyone puts their hands into the circle. The class ends with Teacher 9 and the students chanting, “One, two, three, team.”

## **Teacher 10**

The location for this PE class is outside on the soccer field since the drama club is setting up for a school play in the gym. There are less than 10 students in the class. The students begin the class with a jog and walk to warm-up, followed by a series of stretches and drills. The students in this PE class played a game called Bocce.

The students begin the class period in the gym, and the PE teacher takes attendance. The PE teacher tells the class that they cannot use the gym today because the drama club is setting up for a school play. There is one paraprofessional in the class. After taking attendance, the PE teacher and the paraprofessional take the students outside to the soccer field. Once the students are outside, they begin with a warm-up jog and walk around the soccer field, followed by a series of stretches and drills. During the warm-up, the PE teacher uses the following language to communicate to the students in the class:

“Take two laps around the soccer field.”

“One more lap to go.”

“Stop over there.”

“You’re the fastest one out here today.”

“High knees.”

During the stretches and drills, the PE teacher uses the following language to communicate to the students in the class:

“Lunges.”

“Straight legs.”

“Good job.”

“Use your opposite arm and leg.”

“Are you toasty now?”

“Turn and burn.”

“Good job.”

“Finish strong.”

The paraprofessional uses the following language to communicate to the students in the class during the stretching and drills:

“Set a good example.”

“Good job.”

After the warm-up, stretching, and drills have been completed, the PE teacher divides the students in the class into four separate teams. The Blue team will play against the green team, and the red team will play against the orange team. After the teams have been selected by the PE teacher, they begin playing the first game of Bocce. The PE teacher uses the following language to communicate to the students in the class during the game of Bocce:

“You have to work together to score.”

“Let’s go.”

“Alright, I like that roll.”

“The score is 3 to 2.”

“Wow, okay.”

“Alright, line it up again.”

“Alright, good job.”

“Hop, skip, jump.”

“The score is 9 to 9, tie game.”

The paraprofessional uses the following language to communicate to the students in the class during the game of Bocce:

“Come on team.”

“Another good one.”

“Don’t forget to grab that green ball.”

“That’s what I’m talking about.”

As the third and final game of Bocce comes to an end, the PE teacher, and the paraprofessional walk around and give the students in the class high fives. The third game ends, and the PE teacher says, “Alright, you can put your Bocce balls back into the bag.” The students help pick up all the Bocce balls and equipment. The students, PE teacher, and paraprofessional leave the soccer field and head back to the gym to end the class period.

### **Teacher 11**

The location for this PE class is outside on the playground. There are less than 20 students present in this PE class. The students in PE class today begin with a short meeting in the cafe/gym, and then go outside to participate in PE class. The students participated in a game called Ghost in the Graveyard.

At the beginning of the PE class, Teacher 11 walks outside of the gym and across the hallway to the library where the students are waiting to be escorted to the gym. Teacher 11 brings the students into the gym and begins class with reviewing the A.B.C.D. rules of PE, and Teacher 11 goes over the PE checklist with the students in the class, which reiterates safety rules and procedures. After the PE teacher takes attendance, she takes the class outside to the playground. The students first participate in a warm-up activity. During the warm-up activity, Teacher 11 uses the following language to communicate to the students in the class:

“Stand up and leave your water bottle on the ground.”

“We are going to play outside today because we have beautiful weather.”

“Touch the yellow slide, touch the blue monkey bars, touch the white bench.”

“Have a seat over there.”

“Go touch two of the trees.”

“I need to have your whole body listening.”

Once the students finish the warm-up activity, the PE teacher tells the class that they are going to play a game called Ghost in the Graveyard. Teacher 11 explains the rules to the students, and uses the following language to communicate to the students during the game:

“Once you count to 30, call out Ghost in the Graveyard.”

“I see ghosts hiding in the graveyard.”

“When you’re tagged, where do you go?”

“You can hide with a friend.”

“Do you need to rest?”

“Look and see who the ghosts are.”

“Let’s get that shoe tied.”

“If you’re getting tired, find a place that’s closer to hide.”

“Second graders, if you can hear me, put your hands on your knees, touch your nose.”

“Good job.”

During the game, there is a paraprofessional teacher that joins the class with a student that she has escorted to the PE class. During the second round of Ghost in the Graveyard, the paraprofessional dances with some of the students that have been tagged as they return to their starting spots on the playground. The paraprofessional uses the following language to communicate to students in the class during the game:

“Good job.”

“Nice work.”

The PE teacher ends the second game of Ghost in the Graveyard and tells the students in the class that they can use the last 10 minutes of class for free time. The PE teacher has brought a bag of balls out to the playground, and some of the students decide to use some of the balls in the bag. There are other students in the class that decide to play on the playground for the last 10 minutes of class. During the last 10 minutes of class, Teacher 11 uses the following language to communicate to the students in the class:

“If you’re going to kick the ball, use this ball.”

“One more minute.”

“Get your water bottle after you put away the balls.”

“Can you take responsibility for that blue bag?”

The PE class ends with the students picking up all the equipment and balls and putting them into a blue storage bag. The class leaves the playground and enters the building. It is the end of the day, and the students line up to go to the bus or line up in the pick-up line for their parents to get them.

## **Teacher 12**

The location for this class is in the gym. There are less than 25 students in the class. The students begin class with a warm-up that includes running/jogging and push-ups, sit-ups, and planks. The first Basketball activity being played is called King of the Key. The class concludes with the students playing the Basketball game Knockout.

The students enter the gym, some of the students go to the locker room to drop off their belongings and some of the other students come sit on the gym floor at the center of the basketball court. The PE teacher takes attendance as the students come out of the locker room



and have a seat on the gym floor. The PE teacher says, “Come on, hurry up.” The PE teacher tells the researcher that this is a High School class, grades 9-12. The PE teacher says, “We are going to have plenty of time to play.” The PE teacher says, “Let’s do it.”

The students begin their warm-up by walking around the outside of the basketball court. The PE teacher uses the scoreboard clock to keep track of the time students have walked around the gym. The PE teacher asks one of the students in the class, “Did you have a good weekend?”

The PE teacher tells the students to stop walking for their warm-up and to go grab a quick drink of water. Some of the students stand around waiting for the next activity, and some of the students go to the water fountain to get a drink of water. At the end of the water break, the PE teacher says, “Everybody get a partner.” The PE teacher tells the students that they are going to jog to the other side of the basketball court and then once they get back to the other side, they are going to do 10 sit-ups. The PE teacher stands at the front of the gym near the stage as the students complete their jogging and sit-ups. The PE teacher says, “Come on, almost done.” Followed by, “You only have one minute left.” Once the students finish, the PE teacher tells the students that the next activity they are going to complete includes a series of push-ups and jogging. The PE teacher says, “Let’s get ready here.” The PE teacher starts the students on the next activity of jogging and push-ups. The PE teacher asks one of the students, “Are you hurt?” The student replies, “No, just a little tired.” The PE teacher tells the class, “Finish this, and you get a 2-minute break.”

The students end the jogging and push-ups and get a 2-minute break. The next activity, the PE teacher has the students jog back and forth to the other side of the gym, and when they get back to their starting spot, the students hold a plank for 10-seconds. The PE teacher says, “Almost done, then you get a 3-minute break.”

The PE teacher tells the students to take a break and that they are done with that activity. The PE teacher tells the students that they can grab a drink of water if they need it before they move on to the next activity. Some of the students use the 3-minute break to have a seat at the center of the basketball court.

The PE teacher has all the students meet at the center of the basketball court. The PE teacher says, “Thursday and Friday, I’m not going to be here.” The PE teacher follows by saying, “I expect excellent behavior while I’m out.” Then the PE teacher begins to tell the class that tomorrow is a make-up day for pictures. The PE teacher tells the students to stand up and move to the outside of the 3-point line on the basketball and have a seat. The PE teacher says the next game is called “King of the Key.” The PE teacher says, “Now, if I make this first shot, I move to the next shot.” Followed by, “If I chance it, and miss, I have to stop and go back.” The PE teacher says, “You must take your first shot here.” The PE teacher ends by saying to the class, “This is pretty simple, right. Any questions?”

The PE teacher explains the next game “Knockout.” The PE teacher tells two students in the class to stand up and demonstrate how the game is played. The two students stand at the free throw line. The PE teacher explains to the class that if the first student misses their shot, then the second person standing in line must make their shot before the first person in the line makes their shot, and if the second person makes it first then the first person in line is knocked out.

The PE teacher has all the students stand up, and they line up to begin playing King of the Key. The PE teacher walks around and talks to some of the students in the class. The PE teacher says, “Hey, if you’re not shooting, you need to be rebounding.” During the King of the Key game, the PE teacher uses the following language to communicate to the students in the class:

“Do you remember this game?”

“It’s good.”

“Alright, nice shot.”

“This is it, it’s going in, I have a feeling.”

“Hold it for a second.”

“You have to move over there to shoot.”

“Take your time, it’s not a hot potato.”

“Again, if it was easy, they wouldn’t pay professionals millions of dollars.”

“Use the power in your legs.”

Next, the students begin playing the game Knockout. During the Knockout game, the PE teacher uses the following language to communicate to the students in the class:

“Here we go, let’s play.”

“Nice job.”

“Alright, I like it, I like it.”

“Everybody good?”

“Your shots are good.”

“Go to the back of the line.”

“Nice follow through on your shot.”

“That’s okay, try again.”

“There’s nothing you could do about that one.”

The PE class ends with the PE teacher saying, “Hold please.” The PE teacher asks the students to help put the basketballs away, and then the students go to the locker room to get their belongings

before the PE class ends. Approximately 5 basketballs were the only pieces of equipment used during the PE class.

### **Teacher 13**

The location for this class is in the gym. There are less than 20 students in the class. The students begin class with a warmup that includes jogging around the basketball court. The first activity being played is Sheep Tag and the second activity is called Home Base Stretches. The second activity being played is Field Hockey. The class concludes with the students playing the game Shark Attack.

The PE teacher plays the song “Dynamite” by BTS. The students enter the gym, and they put their water bottles on the bench. The students begin class by jogging around the basketball court for their warm-up activity. After the students finish their warm-up, they meet at the center of the gym and the PE teacher goes over the schedule and activities that they will be participating in today for class. The PE teacher tells the researcher that this is his 5th grade class.

The class begins their first game called Sheep Tag. The PE teacher tells the class that out of bounds is the basketball court lines. The game starts with the PE teacher playing the song, “Wake Me Up” by Avicii. Some of the students in the class are using a foam blue stick to tag other students in the class. Once a student is tagged, they sit on the ground. There are two other students in the game that have an orange foam ball, and they tag the students that are sitting on the ground. Once a student sitting on the ground has been tagged by the student with the orange ball, they stand up, and resume playing the game. During the Sheep Tag game, the PE teacher uses the following language to communicate to the students in the class:

“Ready, set, go.”

“Where are you supposed to be?”

“Come to the green line.”

“If you’ve been a tagger, go over there.”

“Okay, if you have a ball, bring it to me.”

At the end of the game, the PE teacher says, “Nationwide” and the students respond, “Is on your side.” The students transition from Sheep Tag to Field Hockey, and the PE teacher says, “Let’s sit on the green line.” The PE teacher asks the class, “What is the difference between Field Hockey and Ice Hockey?” The PE teacher tells the class, “You can only use one side of the Field Hockey stick, unlike Hockey where you can use both sides of the stick.” The PE teacher explains to the class that they are not allowed to use the round side of the stick. The PE teacher tells the class that they cannot use their feet in Field Hockey. The PE teacher reviews some safety rules for Field Hockey with the class. The PE teacher tells the students that they cannot raise the Field Hockey stick above their stomach to hit the ball, so that they do not accidentally hit another student in the class in the head. The PE teacher ends with telling the students to go pick out a stick from the bucket that they will play the game with. The students return to their original spots, and the PE teacher shows the students in the class how to properly hold the field hockey stick in their hands.

Halfway through the PE class period, there is a paraprofessional/assistant teacher that enters the gym with a student. The PE teacher tells the students that they are going to work on some drills before they play a field hockey game. The PE teacher explains what a “V-Grip” is and how “Dribbling, using one side of the stick” works. The PE teacher then tells the students to spread out and practice rolling the ball with the field hockey stick around the gym. The PE teacher walks around the gym and works with some of the students individually on how to better hold the field hockey stick and how to hit and roll the ball using their field hockey stick. As the

students practice this skill and activity, the PE teacher plays the song, “Imperium” by Madeon. When the song ends, the PE teacher says, “Throw your stick on the ground.” The PE teacher says, “We are going to speed things up a little bit.” The PE teacher tells the students that some of the students are going to play defense for the next activity. The PE teacher reminds the students that they cannot use their feet to touch or move the ball.

The students begin the next activity/game using the field hockey sticks. The PE teacher tells the students that this activity is called, “Shark attack.” Half of the students are “Sharks” and are playing defense. The other half of the class is trying to use their stick to keep control of the ball without the defender taking it away from their possession. The paraprofessional in the class walks around during this activity and helps some of the students properly hold the field hockey stick. The PE teacher uses the following language to communicate to the students in the class during this activity:

“Everyone back to the line.”

“Okay, you ready?”

“Sharks to the circle.”

“Try to keep it inside the lines.”

“Let’s go sharks, let’s go.”

“Let’s work on those skills.”

“Come on sharks.”

“Keep it low.”

“Are you okay?”

“Alright, here we go.”

“Four sharks are in the middle.”

“Here we go.”

“Good try, good hustle.”

“Whoa! There you go.”

The game ends and the PE teacher assigns four new students to be the “Sharks” for the next game. To start the next game, the PE teacher plays the song, “Better When I’m Dancing” by Meghan Trainor. Once this song ends, the PE teacher tells the class, “Put your ball in the little bucket” and “Come back to the middle of the gym.” The class ends with the students meeting in the middle of the gym, and the PE teacher tells the students, “I feel really good about the Field Hockey games that are starting tomorrow.” The PE teacher reviews some of the safety rules, and says, “Really great job today.” The students in the class line up at the door at the end of the class period, and the PE class ends with the PE teacher telling the students, “See you tomorrow.”

#### **Teacher 14**

The location for this class is in the gym. There are approximately 25 students in the PE class. The students in this PE class play the game Pillow Polo.

The students enter the gym and go straight to the locker room to drop off their personal belongings and to change for PE class. The PE teacher goes into the girl’s locker room for approximately 7 minutes.

The PE teacher exits the girl’s locker room and tells the students in the class to line up for attendance. As the students are lining up for attendance, the PE teacher asks, “What’s your favorite Thanksgiving food item?” The PE teacher walks up and down each of the five lines and the students tell the PE teacher their favorite Thanksgiving food item. The PE teacher finishes taking attendance and tells the class that the most favorite food item was mashed potatoes for this class. The PE teacher then tells the class to divide up amongst themselves into two groups, those

that like cranberry sauce and those that do not. The PE teacher says, “This is really interesting as this unfolds.” The PE teacher then has one of the groups divide themselves into two additional groups, those that like canned cranberry sauce, and those that like organic homemade cranberry sauce.

The PE teacher tells the class to circle up near the right corner of the basketball court to meet as a class. The PE teacher tells the class that the game they are playing today is called Pillow Polo. The PE teacher reviews the rules and safety procedures for the game. The PE teacher tells the students, “No head shots.” The PE teacher adds, “Goal keepers, where is your box?” The PE teacher says, “You have to tap it in.”

The Pillow Polo game begins. During the game, the PE teacher uses the following language to communicate to students in the class:

“Don’t try to kick it like soccer.”

“I like this group, and I think you work relatively well together.”

“I will allow you to stand with your buddy.”

“If you are a number 1, raise your hand.”

“Team 2 grab yellow.”

“Spread out.”

“Good job.”

“Look as you tap it.”

“Bend those knees.”

“There you go, you can use the wall.”



After the first game, the PE teacher rotates the third team in to play the game. The winning team in the first game stays on the court. The second game begins. The PE teacher uses the following language during the second game to communicate to the students in the class:

“That’s better.”

“Don’t get frustrated, it’s alright.”

“Good, spread out, swing it.”

“Work together with the Blue team.”

“Watch the elbows.”

“You’re getting much better at this.”

“Tap, tap, tap it in.”

“There you go.”

The PE teacher also uses the first name of each student in the class every time she communicates to them and provides them with feedback. The second game ends, and the PE teacher rotates in the next team, and the winners in the previous game stay on the court. The PE teacher tells the class that the yellow team is going to play the blue team. During the third game, the PE teacher uses the following language to communicate to the students in the class:

“Skill and improvement.”

“You’re doing a great job.”

“Get it.”

“Use the stick.”

“Yes, break away.”

“Play on.”

“You’re getting sucked into the middle, spread out.”

During the third game, the PE teacher tells the researcher that there are grades 9-12 in this class, but mostly 9th and 10th graders. Only one or two 11th and 12th graders. The game ends, and the PE teacher rotates in the next team for the following game. Before the next game starts, the PE teacher tells the class that if they need to go grab a drink, they can go to the drinking fountain to get some water. During the game the PE teacher uses the following language to communicate to the students in the class:

“That’s it.”

“The subconscious kicks in every now and then.”

“Problem solving.”

“Yea, that’s it. Carry it.”

“That’s perfect timing.”

“20 seconds left.”

“Nice save.”

“That’s why we don’t kick it.”

The PE teacher ends the game, and the next team rotates into play on the basketball court. The foam ball that’s being used for the game gets a tear on the side, and the PE teacher tapes it up with duct tape to fix it. The winning team from the previous game stays on the court and plays the new team that’s entering the game. During the next game, the PE teacher uses the following language to communicate to the students in the class:

“Hey, they don’t have to have a goalie.”

“Good choice.”

“Keep it low, bend your knees.”

“Remember when I said earlier that you don’t know your own strength.”

“Look to find a teammate.”

“Good job, thank you for taping it.”

“That’s a good tap, that’s a legal tap.”

“Nice pass, you’re doing just fine.”

“No, no, no, don’t kick it like that.”

“Nice shot, watch the elbow.”

Next, the PE teacher tells the class to make their last switch, and that the yellow team is off, and the blue team is on. The team waiting on the sideline enters the game for the final match and last round. During the last game, the PE teacher uses the following language to communicate to the students in the class:

“Keep it on your side and roll it next time.”

“Keep going, only a few minutes left.”

“There you go.”

“15 seconds to go.”

“Last shot, freeze, good timing.”

The last game ends, and the PE teacher tells the students in the class to help clean up and put away the equipment that was used to play the game today. The foam sticks and foam ball go into a blue mesh bag, and the students work together to get everything cleaned up. The PE teacher tells one of the students to watch their language and not use profanity. The class ends with the students walking around the gym floor and trying to get out some of the scuff marks on the floor. The PE teacher also brings the class in, and they meet before the bell rings. The PE teacher asks the class what worked well for them today during the game. The PE teacher asks the class if slowing down during the game while they were playing helped them more today. The PE teacher

asks what the score was from the games and asks the students who won their games. The bell rings and the class period end, and the students leave the gym.

Lastly, many of the Physical Education (PE) teachers used music before, during, and at the end of the class period to engage and motivate students to warm-up, participate, and complete the cool-down and cleaning up activities to put the equipment away. The list of songs played by the Physical Education (PE) teachers observed in this study included the following:

“You Can Call Me Al” by Paul Simon

“Don’t Stop Believing” by Journey

“Juke Box Hero” by Foreigner

“Eye of the Tiger” by Survivor

“Danger Zone” by Kenny Loggins

“Levitating” by KIDZ BOP Kids

“Shooting Stars” by Bag Raiders

“Best Day of My Life” by American Authors

“Be OK” by Ingrid Michaelson

“Tiny Dancer” by Elton John

“Livin’ for the Weekend” by Fitz & The Tantrums

“I’m so Excited” by Pointer Sisters

“Love Shack” by the B-52’s

“Girls Like You” by Maroon 5

### **Target Journal and Rationale**

Effective dissemination simply entails communicating your research’s findings to the individuals who can use them, maximizing the researcher’s immediate benefits (National

Institute for Health and Care Research, 2022). Therefore, upon completion of the study and doctoral degree at SNHU, the researcher would like to submit the article and research findings for dissemination at PALAESTRA. PALAESTRA is a quarterly publication designed to be a single source of valuable information for those interested in sport, physical education, and recreation involving individuals with disabilities. The mission of PALAESTRA is to increase the knowledge base of professionals working with children or adults with disabilities, making them aware of the can-do possibilities of their students and clients. In addition, the articles in PALAESTRA's publications cover a wide range of subjects relating to physical activity for people with disabilities, such as recreation, adapted sport, and Adapted Physical Education (APE). The PALAESTRA journal usually features articles by prominent figures in the fields of Adapted Physical Education (APE) and adapted physical activity, many of whom are NCPEID members. To continue receiving quarterly issues, lifetime members must renew their PALAESTRA subscription on a yearly basis.

## **PALAESTRA**

### **Submissions**

Authors are required to check off each of the following boxes as part of the submission procedure, and submissions that do not meet these rules may be returned to the authors:

1. The submission has not been published before, and it is not being considered by another journal (or an explanation has been provided in Comments to the Editor).
2. The researcher has read and complied with the author guidelines before submitting this work.

## Author Guidelines

The researcher should be aware that PALAESTRA does not accept submissions using the internet method. Submissions need to be submitted using the information below to submit my work:

1. PALAESTRA is a refereed professional magazine that covers all facets of sport, physical education, recreation, and allied activity areas that involve individuals with disabilities on a quarterly basis (autumn, winter, spring, summer).  
Information for departmental use and short fillers is encouraged.
2. PALAESTRA's scope is broad, covering topics like practical applications for training, coaching, and leadership; implications and applications of scientific research for training and teaching; administration, supervision, and management; professional preparation and in-service education; creative ideas and practices; assessment and classification; connections between basic sciences and techniques and activities for people with disabilities; sports medicine and athletic training.
3. A strict double-blind review procedure is used. Members of the editorial board and/or other qualified specialists who cover all the topics covered by PALAESTRA read the manuscripts before publication. If a manuscript has not already been published, simultaneously submitted, or accepted for publication elsewhere, it will be accepted for review and consideration. PALAESTRA will review articles that have been turned down by other journals. There are no fees for pages or illustrations.

## **Terminology**

The terminology used throughout PALAESTRA is contemporary and widely accepted. People are the focus, not limitations (i.e., students who are blind; athletes with spinal cord injuries; participants who have intellectual disabilities; persons who use wheelchairs for mobility are wheelchair users; not wheelchair bound, etc.). Individuals with disabilities, not handicaps, conditions that make someone handicapped, or impairments, are being discussed. This “person first” philosophy should be used by authors in their manuscripts (PALAESTRA, 2022).

## **Guidelines**

The following recommendations are intended to help authors when putting together articles for the PALAESTRA review and editorial process:

1. All submissions must be in English.
2. Discuss any subject relating to sport, physical education, recreation, dance, and other related fields involving individuals with disabilities, each interpreted and applied in its broadest sense.
3. A maximum of 12 to 15 double-spaced pages, without illustrations or tables, should make up the document (8.5 x 11 with margins of at least an inch). Include an abstract that is about 100 words long.
4. Lastly, for all style-related issues, refer to the American Psychological Association Manual (APA 6th ed.).

## **Privacy Statement**

The names and emails entered on this journal’s website will only be used for the purposes for which they were entered, and they will not be shared with anyone else or used for any other purposes.

## **Section Five: Contribution to Practice**

### **Introduction to the Practitioner Contribution**

Analysis of the interview transcript revealed several key themes that best capture the Physical Education (PE) instructors' perceptions of the difficulties they face when engaging children with disabilities in general physical education (GPE). First, the teachers' perceptions that their class schedule arrangements were constrained are revealed by the first main topic, which highlights "time" as a significant obstacle and barrier. For example, all the Physical Education (PE) teachers at Elementary and Middle Schools stated that they only see their students one time per week. One of the participants stated that sixth graders at their school do not receive Physical Education (PE) at all for the entire school year. Other barriers included lack of physical space, funding, equipment, and Physical Education (PE) teachers stated that they struggle the most with students that are non-verbal and have Social Emotional Learning (SEL) disabilities and behavioral issues. Only one of the participants in this study indicated that they do not feel fully supported by their administrators, i.e., the principal and assistant principal at their school. Furthermore, the idea that physical activity and exercise are good for everyone, even those with limited mobility and disabilities, led to the necessity for Physical Education (PE) programming for all students in public schools. Moreover, supporting fitness in rural public schools is mostly dependent on the creation of programming that considers the involvement of all students by the Physical Education (PE) teacher. However, paraprofessional support and the creation of programming that promotes physical activity and fitness at a challenging level while incorporating adaptations for learners who need adapted ways to participate is one of the issues facing Physical Education (PE) teachers in New Hampshire.



### **Practitioner Contribution (Report, Analysis, Tool, Practitioner Article)**

The research employed triangulation to lessen bias, boost validity, and enhance credibility. Triangulation in this study consisted of document collection, observations, and a series of two interviews. The researcher observed teachers of Physical Education (PE) that made use of skill modifications, modified equipment, and specific equipment tailored to the requirements of the student. In addition, several documents were collected from Physical Education (PE) teachers in rural public schools across the state of New Hampshire, which included lesson plans, unit plans, and course syllabuses. Each participant was interviewed two times; the first interview was conducted in-person and the second interview online via Zoom.

Thirteen of the Physical Education (PE) teachers in this study stated that they have adequate and sufficient administrative support; however, many of the PE teachers faced barriers and challenges when trying to work with students that have Social Emotional Learning (SEL) disabilities and behavioral issues.

“Um, and we, we know it's not always because of their disability, but sometimes, sometimes it is, is they, they're not realizing the social cues around them, um, or things like that. So those are kind of the ones that I find more struggling.” (Participant 2).

The research found that paraprofessional support is lacking, and, in some cases, it is completely non-existent in the PE classroom. Several of the participants in this study suggested that paraprofessionals need more training in Adapted Physical Education (APE) to better help students with disabilities in PE class.

“Those are the things the most, that's the hardest part again with time trying to cram a lot into a little time, but having to slow down to take care of, of that, uh, the para support

would be more helpful, um, in those instances. And I wouldn't, I'm going add on to that having paras, uh, trained better.” (Participant 1).

Recommendations emerged that Physical Education (PE) teachers receive training and think about becoming a Certified Adapted Physical Educator (CAPE). Several of the participants in this study reported that they only completed one class in Adapted Physical Education (APE) to obtain their bachelor's and master's degree in Physical Education (PE).

“I only had one class in Adapted Physical Education, it was like a one-hour credit class or a half hour. Mm,. It was, uh, one semester, once a week for two and a half hours. And it was literally called Adapted Physical Education.” (Participant 1).

The study also showed that elementary and middle school students have limited opportunities to take Physical Education (PE) classes. One of the participants in this study reported that sixth graders at their school do not even get to take Physical Education (PE).

“Yeah, so the sixth-grade class doesn't have PE um, because of the UA schedule, and they need to take guidance as a sixth grader, which is kind of like the DARE program. Um, they, they get one UA bumped each year. So, sixth graders just happen to not have PE whereas like eighth graders don't have, uh, music or bands. So, unfortunately, the sixth graders do not have PE with me.” (Participant 2).

### **Plan for Dissemination (Who, When, and How)**

The researcher would like to present at the following conferences upon completion of the study and doctoral degree at Southern New Hampshire University: The 54th annual New England Educational Research Organization (NEERO) on May 3, 2023 in Portsmouth, New Hampshire, at the New Hampshire Association of School Principals (NHASP) conference in Portsmouth, New Hampshire, the 9th annual Adapted Physical Education (APE) conference at

the University of New Hampshire (UNH) in Durham, New Hampshire, the Society of Health and Physical Educators (SHAPE) Vermont conference in Killington, Vermont, the National Consortium for Physical Education for Individuals with Disabilities (NCPEID) Conference in Washington D.C., and the New Hampshire Association for Health, Physical Education, Recreation and Dance (NHAHPERD) Conference in Waterville Valley, New Hampshire. In addition, the researcher would like to be a guest on the What's New in Adapted Physical Education (APE) podcast which is hosted by Dr. Scott McNamara. Lastly, the research will submit a journal ready article for potential publication at PALESTRA which is published quarterly by Sagamore-Venture and is a great resource for Adapted Physical Education (APE) and Physical Activity (PA) practitioners and those working in public education.

## **NEERO**

The 54th annual New England Educational Research Organization (NEERO) meeting and conference, with the theme “Practicing Impactful Education Research Toward Truth, Equity, and Accountability,” will be held May 3-5, 2023, at the Sheraton Portsmouth Harborside Hotel in the city of Portsmouth, New Hampshire (New England Educational Research Organization, 2022). This announcement has been made with excitement and pleasure by the Board of the New England Educational Research Organization (NEERO). Doctoral and graduate students can share their educational research with peers in New England and elsewhere thanks to the New England Educational Research Organization (NEERO).

A regional research organization comprising members from colleges and universities, public and private schools, state and municipal educational agencies, health and social care organizations, and education groups, the New England Educational Research Organization (NEERO) was established in 1969. NEERO is an Aligned Organization of the American

Educational Research Association (AERA) and a member of the Consortium of State and Regional Educational Research Associations (Consortium SRERA). The New England Educational Research Organization has supported educational research for more than 50 years. Without the commitment and time of all our members, NEERO's annual conference and other events would not be possible as an all-volunteer organization (New England Educational Research Organization, 2022).

The New England Educational Research Organization's goal is to advance and spread knowledge about all types of educational research. NEERO hopes to accomplish the following by doing this: Providing a stimulating, encouraging, and friendly environment for presentations; Identifying and disseminating effective techniques; Improving educational programs and supervisory procedures; and encouraging the use of original and reliable research. Moreover, NEERO finds itself as a global community navigating a field that is available to some and closed to others, one that is defined by peer-reviewed research but in which policy makers frequently make decisions outside of this process. Numerous research questions are still up for discussion as NEERO reimagines the world after COVID-19. Climate change, social and economic inequality, institutionalized and systematic racism, and access to physical and mental health care are all issues that continue to be present in and outside of the classroom. It goes without saying that NEERO calls on each of us to get up and use our skills to share, collaborate, and learn through educational research as researchers and practitioners, activists and policy makers, students, and teachers (New England Educational Research Organization, 2022).

To do this, NEERO will address the question of how these various and interrelated crises have impacted teaching and learning during the NEERO 2023 Annual Meeting. NEERO seeks to answer the question: How do modern curricula, instruction, research techniques, teaching and

learning, and technology advance and strengthen just systems? NEERO wants researchers to identify how, and in what ways, should elected officials and decision-makers hold teachers and administrators responsible for this work. Therefore, creating a space where both beginning and experienced researchers, students, professors, policymakers, instructors, consultants, and activists may interact to share research and have frank discussions is an essential part of NEERO (New England Educational Research Organization, 2022). Lastly, there are several awards up for grabs at the 2023 NEERO conference. The John Schmitt award is given for exceptional graduate-level research, the James J. Rubovits award recognizes the top paper presented at the NEERO annual conference, and the Kim Fries early career award recognizes members who have excelled early in their professional careers.

## **NHASP**

June 2023: The New Hampshire Association of School Principals (NHASP) Leadership Conference in Portsmouth, New Hampshire. The NHASP is a group that is run by its members with the goal of helping and supporting its members all around the state. To accomplish this, they provide principal mentorship training and services, professional development opportunities, job postings, and a variety of leadership services tailored to the needs of elementary, middle, and high school administrators in all locations. The New Hampshire Association of School Principals collaborates closely with the federal government, other professional service organizations, and the state's department of education (NHDOE). They work together to ensure that all New Hampshire children receive a top-notch education.

This year, in 2022, the event attracted over 160 people, including Assistant Principals, Principals, Assistant Superintendents, and Superintendents. The event was previously held at the Mount Washington Hotel, which was about four years ago, and that event attracted nearly 120

school leaders in the state of New Hampshire (B. Bellemare, personal communication, July 18, 2022). For decades, the organization has held a winter and spring conference, but the structure of them has been a bit different from their Leadership Academy, which was instituted four years ago by then interim Executive Director, Ken Page (NHASP, n.d.).

What is different about this format, is that (NHASP) worked to balance the event with rigorous breakout sessions including presenters from the field, as well as from professional consultants. NHASP has worked diligently the last couple of years to design the event based on the professional learning needs feedback received from the NHASP annual membership survey (which goes out to members in May). Of course, of equal importance and interest is integrating opportunities for collegial networking and collaborative partnering (B. Bellemare, personal communication, July 18, 2022).

Historically, the NHASP organization has hosted the event at the Mount Washington Hotel, which is now owned and operated by Omni. Several years ago, NHASP chose to leave this venue for a myriad of reasons; mainly cost and working with new management was not easy. Additionally, many of the NHASP members shared that they were ready for a change of venue, as some people viewed this as more of a resort vacation than a professional conference. Additionally, in reviewing their data of attendees, NHASP noticed that it was mostly south central and southern region members who attended. They had no north country attendees and very few from the southwest. NHASP also received feedback that the program was lacking interest and rigor and was “more of the same old thing.” (B. Bellemare, personal communication, July 18, 2022).

Moreover, pre-pandemic NHASP had begun to explore other venues and NHASP finally settled on the Sheraton Harborside Hotel, in Portsmouth. The venue was large enough to hold an

event of their size, the management was excellent to work with, and it was in walking distance to downtown Portsmouth, which offered so many things for people to do in their down time (NHASP, n.d.). Due to the pandemic, NHASP had to defer their contract with this venue for two years.

This past June was the first year NHASP were able to be back in person since their last event at Mount Washington four years ago. Not only did NHASP receive feedback that the event was a huge success, but the venue was so good to everyone; they permitted NHASP to renew the dates for the venue, which was unbelievable; most venues are not doing this due to COVID-19 restrictions and availability. The entire team at the venue was exceptional to work with and the majority of the NHASP membership overwhelmingly are looking forward to returning to this same venue in 2023 (B. Bellemare, personal communication, July 18, 2022). NHASP has retained the following dates for next year's event: Monday, June 26 to Wednesday, June 28, 2023. Again, NHASP will work to offer a balanced professional learning program that integrates best practices from the field and beyond, and they have some fun and engaging networking events in development as well (NHASP, n.d.).

In short, NHASP is excited to host the 2023 event and hopes to have some SAVE THE DATE promotions going out to the field this summer. NHASP has hired a videographer, as a part of their marketing goals for helping to promote interest in this event. The video (from this year's event) will be sent out late August (B. Bellemare, personal communication, July 18, 2022). No doubt, this will be a great event to present my research findings as it relates to Adapted Physical Education (APE) in New Hampshire rural public schools.

### **APE at UNH**

March 2023: The Adapted Physical Education (APE) Conference at the University of

New Hampshire in Durham, N.H. Next year will mark the 9th annual Adapted Physical Education (APE) conference at UNH. The last two years have been online via Zoom; however, next year the conference will be held in-person at the UNH campus. Notwithstanding, on this date in 2023, it will be packed with workshops and activity sessions to increase participants' understanding of Adapted Physical Education (APE) (Adapted Physical Education Conference, 2023). This year, Dr. Karen Collins, Dr. Michelle Grenier, Ann Griffin (CAPE), Dr. Scott McNamara, and Dr. Ronald Croce were keynote speakers and presented at the 2022 Adapted Physical Education (APE) conference in which over 60 professionals in the field of APE attended.

### **SHAPE Vermont**

March 2023: The Society of Health and Physical Educators (SHAPE) Vermont Conference in Killington, Vermont. Over 300 professional and pre-professional members in the fields of health and Physical Education (PE) are represented by the Society of Health and Physical Educators of Vermont. SHAPE Vermont seeks to support its members all through the year by offering opportunities for professional development, advocating for our field, and delivering information that is pertinent to Physical Education (PE) (SHAPE Vermont, n.d.). This annual conference provides information on outstanding programs, grants, new state regulations, and services for their members, which is held every year.

The group welcomes members who work in the disciplines of health education, coaching, adaptive services, teacher preparation, Physical Education (PE), recreation, and dance (SHAPE Vermont, n.d.). For their professionals, yearly dues are kept reasonable. The Vermont college student members have access to scholarships for professional development. Physical Education (PE) teachers can network with other professionals in their field and in adjacent fields by joining



SHAPE Vermont.

SHAPE Vermont is a member of the Eastern District, a professional association operating at the local level and across the New England area. These member states make up the Eastern District: New Hampshire, Vermont, Connecticut, Delaware, Maine, Maryland, Massachusetts, New Jersey, New York, Pennsylvania, and Rhode Island (SHAPE Vermont, n.d.). A state-level organization supporting these states and occupations around Physical Education (PE) and recreation is the SHAPE Vermont. Moreover, the target audience for the SHAPE Vermont conference and session is teachers that serve students in grades K-12. However, non-members may join SHAPE Vermont and sign up for this event, including school nurses, paraprofessionals, physical activity-based school employees, Physical Education (PE) teachers, health educators, and pre-professionals in PE and health (SHAPE Vermont, n.d.).

## **NCPEID**

July 2023: The National Consortium for Physical Education for Individuals with Disabilities (NCPEID) Conference in Washington D.C. A group of higher education experts established NCPEID in 1975 with the goals of providing quality service, research/demonstration, and teacher preparation. A significant factor in determining the path of Adapted Physical Education (APE) and adapted physical exercise is the NCPEID.

Its members have been actively involved in advocating for legislation and self-help initiatives to raise the standard of Physical Education (PE) and recreation for students with disabilities. Professionals looking for guidance and information on numerous legislative and advocacy topics might benefit greatly from the Consortium. Members also contribute through research and demonstration initiatives to the disciplines' expanding body of knowledge.

The National Consortium for Physical Education for Individuals with Disabilities

(Consortium) is to advance, stimulate, and encourage statutory requirements for physical activity, Physical Education (PE), and recreational opportunities for students with disabilities, as well as professional development, advocacy, and research in these fields. The Consortium encourages the creation of services and programs and shares expert knowledge with its members. Anyone interested in professional development, demonstration, or research pertaining to Physical Education (PE) and recreation for students with disabilities is eligible to join (NCPEID, n.d.).

In addition, public school teachers, residential facility staff, as well as faculty from universities that specialize in Adapted Physical Education (APE), are urged to join. The one-year professional membership rate is \$75 for public educators and higher education teachers, the one-year full-time student membership rate is \$50, and the lifetime membership rate is \$400. For its annual National Conference program, the NCPEID arranges talks that have been peer-reviewed and competitively chosen. The following session categories are currently looking for proposals at the 2023 event: The Emerging Scholars Symposium, Free Communication Presentations, Round Table Discussions, and Poster Presentations are all available. The standard registration fee to attend the 2023 conference is \$75, and it is only \$50 for early bird pricing if you register by June 15 (NCPEID, n.d.).

## **NHAHPERD**

November 2023: The New Hampshire Association for Health, Physical Education, Recreation and Dance (NHAHPERD) Conference in Waterville Valley, New Hampshire. The NHAHPERD promotes healthy lifestyles by educating professionals, students, and the public about health, Physical Education (PE), recreation, and dance. The organization's aim is to advance professional standards, top-notch educational opportunities, career advancement, legislative support, and regional and national affiliation (NHAHPERD, n.d.).

Physical Education (PE) teachers across New Hampshire are encouraged to join and become members of NHAHPERD. Teachers who join NHAHPERD will receive three issues of their state newsletter, NHAHPERD News, access to the organization's website, and notice of any conferences, workshops, or clinics that are sponsored by the organization. In addition, as a member of NHAHPERD, members will have the chance to go to the annual state convention and take part in programs of personal interest; sponsor or promote "Kids Heart Challenge" programs in your school or community; nominate and honor members at the annual convention for accomplishments on behalf of the Association and the profession; actively participate in the political action network responsive to legislative issues; and actively participate in the leadership (NHAHPERD, n.d.).

### **What's New in APE Podcast**

Lastly, the researcher would like to be a guest on the What's New in Adapted Physical Education (APE) podcast. This podcast was created and is hosted by Dr. Scott McNamara. Dr. McNamara is a doctoral graduate of Texas Woman's University and developed this podcast with the aim to provide an insight into the profession of Adapted Physical Education (APE) through interviews with a variety of panels of APE experts and professionals. In addition, the podcast is an attempt to provide an untapped means of easily receiving updates and best practice information regarding Adapted Physical Education (APE).

Moreover, Dr. McNamara has developed several podcasts that range on topics from leadership to working with students with specific disabilities such as Down Syndrome and Visual Impairments. Dr. McNamara has used the podcast to validate and examine the effectiveness in teaching Adapted Physical Education (APE) teachers and related professionals such as administrators and special education teachers. Within the podcast, there have been a

plethora of renowned experts such as Dr. Ulrich, Dr. Lavay, and Dr. Lieberman. Currently, there are 120 recorded episodes that have been published online since the inaugural podcast aired on July 27, 2015.

## **Section Six: Practitioner Reflection**

### **Summary of the Inquiry**

This study provides a rich and personal look into the lived experiences of today's Physical Education teachers in rural New Hampshire public schools, not only as individuals but as instructional leaders as they adapt their lessons for students with disabilities. The researcher's observations of Physical Education (PE) teachers were robust. In addition, the observations confirmed what the participants cited during the interview as challenges and barriers. The researcher noticed that effective classroom management strategies are the result of a Physical Education (PE) teacher's genuine connection with their students, their passion for education, and their openness to discovering their students' needs. Positive interactions between Physical Education (PE) teachers and students influence the PE teachers' capacity to efficiently run the classroom and effectively work with students that have disabilities.

### **Personal Learning, Shifts, and Transformations Related to Focus of Practice**

Personal learning related to focus of practice included designing and systematically presenting Physical Education (PE) units to students that specifically help students with disabilities progress through different levels of difficulty to help master and improve a skill. For example, incorporating movement games in the Fall semester at the beginning of the school year. By the end of the first unit, students will be able to move in space avoiding others. Students will be able to demonstrate an understanding of the roles of offense and defense. The students will demonstrate the personal responsibility of sportsmanship and use a wide variety of movement performances during the activities. The students will complete a reflection paragraph on sportsmanship and observe completing active movement and following rules using a game rubric for the final game.

Participant “E” stated in the first interview that they use manipulative skills such as dribbling, passing, punting, and kicking in the Fall at the beginning of the school year.

Incorporating the researchers personal learning related to the focus of practice, Adapted Physical Education (APE) teachers, in the Fall semester, preferably in Unit Two, can work with students to develop skills such as dribbling around a cone, passing a ball while standing still, and then passing a ball to a moving target. The students will work on understanding and distinguishing between the skills of a punt and a kick. For young learners, especially those with physical and mental challenges, the development of motor skills is an essential part of the learning process.

The development of motor abilities proceeds in a sequential manner, requiring the integration of certain skills before moving on to more complicated operations. In addition, students will actively participate in small groups and praise others' success. For these students, it is crucial that interactions in the classroom encourage the development of motor skills in a way that is age appropriate. Students will be assessed on performance of a pass, punt and kicking using in-step of the foot. It is typical for educators to look for strategies to train students with disabilities by simulating acceptable gross and fine motor movements through interactions with peers in Physical Education (PE). Ultimately, as a student with a disability begins to succeed in Physical Education (PE), the effort of the teacher becomes evident.

Many kids with limited mobility do not get enough chances to explore and play with their bodies' range of motion. Therefore, it is crucial to give kids with motor issues the chance to experiment and practice. Moreover, unit three in the Fall semester could be a continuation of manipulative skills such as tossing and catching, in which students will practice manipulating objects in space. By the end of the unit, the students will participate in a variety of manipulative skills using bean bags, balls, and hula hoops and complete skill challenges. The student will be

able to perform tossing and catching skills with self, partners, and small groups. Students will present an invention to the class and/or skill challenge using a variety of skills. Criteria will be rubric/checklist based for completion of skills or stunt creations.

Throughout a unit of instruction, Physical Education (PE) teachers must be ready to make incremental adjustments, respond to student feedback, and continue an activity in the face of potential difficulties. Participant “A” stated that they use the Fall semester to develop educational gymnastics and locomotor skills, which potentially, as a focus of practice, could be designed in unit four of the Adapted Physical Education (APE) pedagogy. By the end of the unit, the students will complete a checklist of skills to be performed. Participant “A” indicated that the students will be able to perform a movement sequence using one of the apparatuses and complete a 1 foot, two-foot jump off a springboard landing in a balanced position.

Participant “J” stated that they use the winter semester/term to focus on dribbling and passing skills. This participant mentioned that they will revisit skills and drills that were previously covered in beginning of the year unit plans and lessons. The Adapted Physical Education (APE) teacher can work with students in the winter to help them explain and perform three basic passes and dribble a ball in space around cones. Moreover, writing Physical Education (PE) goals, objectives, and understanding the students Individual Education Plan (IEP); creating requirements for and training teacher assistants and paraprofessionals, establishing a peer tutor program at the start of the semester, and continuously assisting throughout the course of the academic year are all strategies that Physical Education (PE) teachers should use to promote positive inclusion. In addition, students should be engaged in lead-up games and team games upon completion of the skills tasks. The planning process

demonstrates an awareness of the approach to achieving the objectives of various learner types in Physical Education (PE).

Other skills and games can be incorporated in the winter to help students with disabilities learn jumping and landing such as jump rope, tinikling and jump bands. The researcher learned during this study that tinikling is a traditional Philippine folk dance, in which students dance. Participant “D” described tinikling as a dance involving at least two students that tap, beat, and slide bamboo poles on the ground and against each other in coordination with one or more dancers that step over and in between the poles using a dance motion and technique. This is an activity which is suitable for the winter since New Hampshire Physical Education (PE) teachers typically must bring their classes inside due to cold weather conditions and frequent snow.

Adapted Physical Education (APE) teachers that want to incorporate jump rope and tinikling in their winter pedagogy can work with students to help them successfully jump over a rope using a single or double bounce. Students can work on completing a minimum of three basic skills, or the skills required for their ability level. Students can work on creating a routine with jumping or a combination of jumping and non-jumping skills. The winter in New Hampshire also provides the opportunity for Adapted Physical Education (APE) teachers to incorporate indoor activities such as bowling and rolling for students with disabilities and physical limitations. Moreover, additional information regarding inclusion can be obtained through in-services, workshops, special education directors, and annual Adapted Physical Education (APE) conferences. These techniques also include adapting policies, tools, curriculum, and environments as needed.

In addition, the researcher’s personal learning related to focus of practice included acquiring the skills and knowledge needed to teach bowling and rolling to students with



disabilities and physical limitations. This includes successfully teaching students how to score the basic math of bowling and completing score sheets. Moreover, assisting students to perform the critical elements of a roll including a three-step delivery, hand, and foot opposition, bent knees, coordinating hand and foot movements using push, drop, swing back and roll. In addition, helping students with bowling techniques such as following through pointing at the pins. Participant “I” stated that they allow students to use video playback in slow motion to check skills and complete a checklist of accomplished skills.

Lastly, the researcher’s personal learning related to focus of practice included acquiring the skills and knowledge needed to incorporate fitness activities for students with disabilities and limitations. For example, working with students individually, or with a partner create a fitness obstacle course containing four of the five components of fitness. Participant “B” stated that they work with students to become familiar with pedometers and be able to track steps, miles, and calories. During the observation of participant “D”, the students in the class participated in fitness games and were able to identify a skill and how it will affect their fitness level and make them successful in obtaining a fitness goal. During the observation of participant “E”, students participated in a warm-up activity, and then they completed a dance individually, with a group, or with a partner. Students were given a chance to create a combination routine that was used with movement and music. Some of the adapted equipment used included step aerobics boxes, jump ropes, sticks, and flags.

Participant “C” indicated that they use the spring semester to work on specific physical activities that incorporate striking with long and short implements. In addition, they use the last two to three months of the school year to work with students on motor movement and fitness assessments. There are many ways to adapt the curriculum and activities for students with

disabilities in Physical Education (PE) class. Moreover, a teacher's grasp of the structural, staffing, pedagogical, and legal parameters of inclusion programming must be reflected in the appropriate inclusion of learners with disabilities in general education classes, including Physical Education (PE) classrooms.

In conclusion, if the student had limited movement with the lower body, the Physical Education (PE) teacher would have them focus on swinging skills. In addition, there are several non-jumping skills that students can learn, and by swinging a rope it is important and helpful for long ropes. Ultimately, the teacher can make up certain skills that can allow for success. Another example, if students are working at different levels, some students could focus on their own level of skills. Participant "H" stated that they have some slow-motion ropes that students can use, hopping over a rope back and forth on the floor. Teachers can also include line jumping. Moreover, adapting equipment and skill level for certain skills can allow for success, but can be challenging in a full class setting that includes several students. Participant "F" suggested giving the correct amount of feedback during a lesson and making appropriate changes when the teacher sees students struggling is extremely important. In addition, as for locomotor skills, it is all about breaking down the skill. For example, if a student was restricted and could not hop over the object, the teacher would have them just step and balance, step, and balance.

Participant "G" stated that it is important for teachers to get ideas from the Physical Therapist (PT) person who can help and sometimes teachers can pre-teach, and students will work on some skills before they attempt them in class. Participant "B" stated, "It's always in the back of my mind to try to simplify things, but not to make the student feel like they are different; this can be a challenge." Ultimately, eliminating these obstacles is now a mandate in public education and developing elements of modifications to Physical Education (PE) curriculum.

### **Certified Adapted Physical Educator (CAPE)**

Physical educators are typically unprepared to instruct students with disabilities in a mainstream physical education context, which is an issue that endures in the field (Block, 2016). Several of the participants in this study indicated that their college coursework and training to become a Physical Education (PE) teacher only required them to take and complete one class in Adapted Physical Education (APE), equivalent to .5 or 1 credit hours to obtain their degree, certification, and license. One of the participants in this study stated the following:

“It can be intimidating in that they come into class, and we have our time together, but like, how the student behaves and what might trigger or, and from when I see the students, I don't often know all those things. I don't have the background; I don't have the experience with those students enough to feel like I know exactly how to speak to them. How, what, what they might understand, what they might not understand. Um, and when they are in a, like a, a big class, it's really hard too, to get that and, and understand exactly what they need. Um, and I think that for the most part, students at the collegiate level should have more training collegiate levels should have more of, uh, more training and that, uh, I know that I didn't have any, uh, practicums or student experiences where I would go into a school and, and spend time with adapted students, like that wasn't a necessity, that wasn't part of, uh, the, the program. And I don't know if it is now, but, um, it probably should be. Um, so I think that there should be more, um, more adaptive PE training in college, when you're getting your degree.” (Participant I).

Therefore, the researcher has come to the following conclusion because of using this phenomenological research design: this is a profound miscarriage of educational justice, and directly paralyzes and limits Physical Education (PE) teachers' ability to effectively deliver

instruction to students with disabilities in PE. The researcher asserts that becoming a Certified Adapted Physical Educator (CAPE) and completing the requirements to earn this endorsement enhances the knowledge and capabilities of Physical Education (PE) teachers to better serve students with disabilities in PE class.

The key player in determining the course and growth of the Adapted Physical Education (APE) and creating the CAPE national certification is the National Consortium for Physical Education for Individuals with Disabilities (NCPEID), a national organization. Its goal is to advance, stimulate, and encourage legal requirements for physical activity, Physical Education (PE), and recreation for students with disabilities as well as professional preparation, lobbying, and research in these areas. To further this mission, the NCPEID created the Adapted Physical Education National Standards (APENS) and the corresponding APENS exam. These standards were created to create and maintain a body of knowledge that Adapted Physical Education (APE) teachers should be able to use to provide high-quality APE services (APENS, n.d.).

Adapted physical educators with the national certification report feeling less marginalized and having a higher sense of importance than those without, according to emerging research (Wilson et al., 2020). Additionally, Physical Education (PE) teachers that work in rural New Hampshire public schools who pass the APENS exam and are certified as National Certified Adapted Physical Educators (CAPEs) may have the opportunity to prove to themselves and their colleagues to be qualified instructors who are equip physical educators to serve students with disabilities. Together, these experts improve results for kids with disabilities and advance the field of Adapted Physical Education (APE).

In addition, Physical Education (PE) instructors who successfully complete the APENS exam procedure to become national Certified Adapted Physical Educators (CAPEs) are qualified

individuals who can make important decisions for students with disabilities in Physical Education (PE). However, unlike other special education fields, most states do not require teachers of Adapted Physical Education (APE) to hold professional qualifications. Currently, there are 36 states and eight territories that have not established the requirements teachers must meet to offer Adapted Physical Education (APE) services to their children with disabilities, while 14 states have defined an endorsement or certification in this field. The following states require Physical Education (PE) teachers to obtain CAPE certification: California, Connecticut, Louisiana, Maine, Michigan, Minnesota, Nebraska, New York, Ohio, Oregon, Rhode Island, South Dakota, Wisconsin, and Wyoming. Note that New Hampshire is not one of the 14 states that requires Physical Education (PE) teachers to obtain their Certified Adapted Physical Educator (CAPE) license and certification to teach students with disabilities in Physical Education class.

The state of New Hampshire, without specialized credentials in Adapted Physical Education (APE), could potentially have general physical educators who are tasked with instructing students with disabilities are frequently ill-prepared, which has a detrimental effect on the educational experience of the students.

The NCPEID Board of Directors has established the following requirements for applicants seeking the national CAPE certification:

1. A comparable bachelor's degree with a major in Physical Education (e.g., Kinesiology, Sports Science, etc.).

2. A minimum of 12 semester hours (credits) devoted only to meeting the educational requirements of students with disabilities, and 9 semester hours (credits) must either be dedicated to the field of Adapted Physical Education (APE) or satisfy the requirements listed below:

- a. Satisfactory completion of at least 9 credits in APE curriculum and 3 credits in related disciplines (such as special education, occupational therapy, physical therapy, speech, recreation, psychology), as attested by official college or university transcripts.
3. Completion of 200 hours at the very least of experience teaching Physical Education (PE) to students with disabilities.
  4. A teaching certificate in Physical Education (PE) that is current and valid.

Once an individual has met the above requirements, they may then register and take the APENS exam for CAPE certification. Unless otherwise prohibited by the APENS Chair, the APENS exam is now only administered online, at any institution on any date throughout the academic year, and at professional conferences such as the annual SHAPE America conference. To assess knowledge in Adapted Physical Education (APE), the APENS test consists of 100 multiple-choice questions. Candidates have three hours to finish the test. Additionally, \$250 is required for the APENS National Certification. The administration and scoring of the APENS exam are included in this cost for candidates seeking initial certification (APENS, n.d.).

### **Personal Learning, Shifts, and Transformations as an Educational Leader**

Just as Heraclitus alluded to in 1839, “No man ever steps in the same river twice, for it is not the same river and he is not the same man.” I too have been transformed by this experience and the knowledge gained throughout this study. Specifically, my experience has been transformed as an educational leader as it relates to social justice and Adapted Physical Education (APE). In addition, personal learning as an educational leader occurred throughout this study as the researcher learned and discovered alternative pathways to helping students that are struggling with Social Emotional Learning (SEL) challenges.

When implementing a directive for inclusion in Physical Education (PE), educational leaders are required to make sure that teachers are properly trained, especially in the application of successful methods of instructing pupils with severe disabilities. Moreover, schools rely on competent and successful instructors, as well as leaders who uphold the profession and promote the school's professional and academic atmosphere. Therefore, educational leaders cannot overlook the fact that social justice is a crucial component of understanding what teachers do to support students with disabilities in their classes, despite causing controversy among many groups involved with public education and particularly Physical Education teachers' innovativeness, involvement, and leadership. Moreover, school administrators get to know their faculty members and learn how best to support and mentor them as they pursue their professional goals and work with students that have disabilities in Physical Education (PE).

Influencing those they oversee is a sign of an effective leader. The job of the principal of a school is to provide an environment that is conducive to learning. Principals are a teacher's best source of assistance in their schools. There are several practitioner reflections which incorporate to encourage participation in Physical Education (PE) and exercise in schools when it comes to supporting an inclusive culture for students with disabilities. First, educational leaders can inform district and school employees of any state laws, regulations, and directives regarding the inclusion of kids with disabilities in Physical Education (PE) and physical activity. This covers the terminology in policies relating to inclusive physical education and physical activities, adapted physical education, professional development for managers and staff on creating an inclusive culture, and certification of employees who work with kids with disabilities. Moreover, inform educational and health leaders of your state's data on students with disabilities. You can find state estimates for students with disabilities using the interactive

data query portal provided by the National Survey of Children's Health symbols. Two inclusion-related items were added to the School Health Profiles survey by the CDC in 2020.

Teachers are supported by Principals, who also provide them feedback and praise when appropriate. Moreover, Participant "B" suggested that educational leaders and Physical Education (PE) teachers can find partners in the state and district that are already in charge of inclusion activities, get in touch with them, and explore prospects for collaboration. Staff from the state's disability program, Special Olympics state affiliates, local university departments working on adapted physical education and inclusion, state affiliates of the Society of Health and Physical Educators (SHAPE) America, experts in adapted physical education, clubs or programs for adapted sports, and allied health professionals such as occupational, physical, and speech therapists are all potential partners.

Teacher's needs are represented by Principals, who also promote student success and safeguard the advancement of the school. Therefore, educational leaders, under the State Disability and Health Programs, can leverage funding, since the CDC provides funding to 19 states, including New Hampshire. Furthermore, educational leaders can make a quick assessment of the situation's demands and activity. This evaluation should pinpoint any ongoing inclusion-related initiatives at the state and district levels (such as programming initiatives, improvements to the built environment, funding, and professional development), as well as any inclusion-related requirements at the district and school levels. Such an illustration of an evaluation instrument is the Community Health Inclusion Index icon from the National Center on Health, Physical Activity, and Disability. It is intended to gather data on resources for healthy living and the extent of their inclusivity. Ultimately, integration of children with physical disabilities and

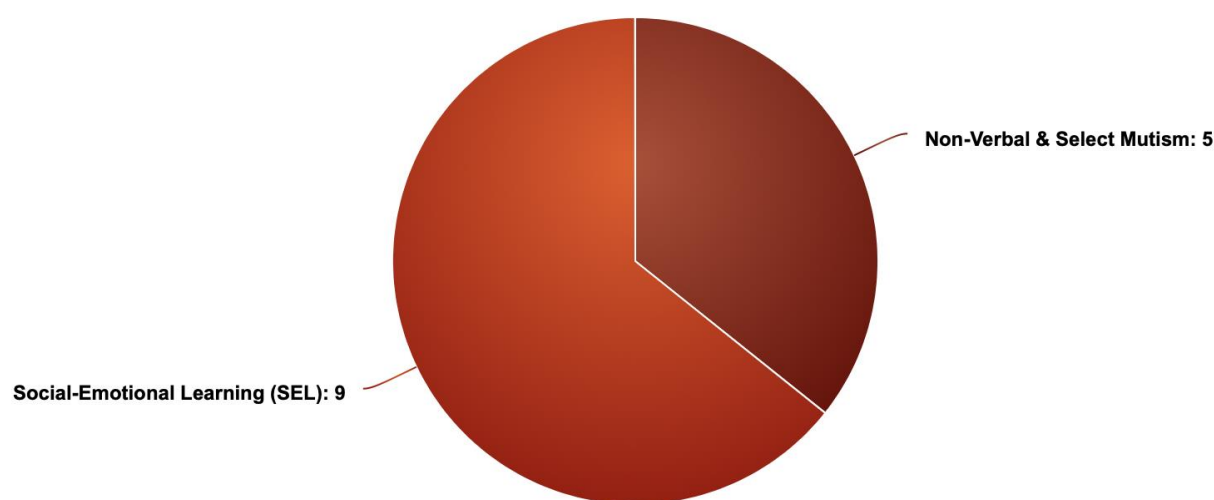


limitations into the educational process and classroom culture is a challenge, not only a matter of educational paradigm.

Participant “C” mentioned that in their first year of teaching, they did not know what the expectations were for teaching students with disabilities in Physical Education (PE) classes. Physical Education (PE) teachers can develop and flourish in an environment where principals set the tone for the school and define the standard of what is accepted under their direction. Additionally, as an educational leader, to ensure that opportunities for physical exercise are accessible and inclusive before, during, and after school, provide district and school employees with training on how to build an inclusive Comprehensive School Physical Activity Program (CSPAP).

Additionally, engage partners and academic programs to provide teachers, physical education instructors, and school administrators with training on inclusive policies and practices. This can entail learning about how to modify and make allowances for equipment, guidelines, rules, facilities, and assessments. Moreover, the school’s educational experiences, which have an impact on both instructors and pupils, are promoted by the principal.

Figure 6: *Biggest Challenge and Barrier*



Most of the participants in this study indicated that working with students that have Social Emotional Learning (SEL) is a barrier and challenge. Specifically, nine out of the fourteen participants in this study stated that their most challenging disability to work with in Physical Education (PE) is Social and Emotional Learning (SEL). Additionally, the other five participants in this study stated that their biggest challenge and disability to work with is students that are non-verbal and have select mutism.

“Um, I know, uh, we have a handful of kids that wear the, um, the headphones that kinda, you know, obviously make it so it's not as loud anymore. Um, but I just feel like trying to make sure we help those kids with those social emotional needs the best that, that we can, I see that as the, the biggest challenge.” (Participant N).

During my observation and second interview with Participant “G”, the participant mentioned that their school created a program called 3R. The 3R (Regulation, Respect, and Readiness) is a special education program for identified students who have difficulty with self-regulation of their behaviors and emotions. In addition, this program is dedicated to IEP students who are placed into the program via an IEP placement meeting after meeting the set criteria for the program. Students can access the program classroom for parts of their day or the whole day. This is based on their emotional status. Students will be asked to complete class work when they are regulated. In addition, students have two ways to access 3R during the school day. Furthermore, there is no set time limit for time needed as it is dependent on each student and the situation.

Option 1. Break (Student or teacher requested): A student can ask (or use a time and space card) to take a break. A teacher can also ask for a student to take a break. A break is when a student needs to reset themselves or an alternative space to complete work.

Option 2. Behaviors (teacher requested): Staff/Teachers request that a student leaves the room for behaviors which interfere with the learning of others. The sending teacher is required to call the 3R room to let staff know the student is coming and why. Sending students to 3R does not replace a behavioral response so if needed, teachers are asked to complete a behavior response.

Physical Education (PE) teachers in the classroom are responsible for educating students and correcting students' conduct through talking to them and developing a solid rapport with them. Therefore, while in 3R and on baseline, staff will process with the student. The student will remain for the rest of the period or until regulated and available for learning. If regulated and time left of class, the student will be asked to complete classwork. Educational leaders at school can develop, create, and implement similar programs to help SEL students that are struggling not only in Physical Education (PE) class but all their academic classes. Moreover, Principals can support a norm for resolving misconduct in the school that unites leaders and teachers and stand with teachers on classroom management techniques in Physical Education (PE). The Adapted Physical Education (APE) teacher and educational leaders at the school can rely on each other via their cooperation in dealing with student behavior, which is a key factor that stands out in the interaction between them and their principal.

Additionally, Participant "A" suggested that when it comes to dealing with behavioral issues in Physical Education (PE), limited teacher disciplinary measures for student misconduct makes them anxious in the classroom. When considering how Physical Education (PE) teachers incorporate adaptive physical education practices in their classrooms, these viewpoints can be helpful. Moreover, to deliver the required educational experiences for students and control the disruptive behavior of some students that impacts the entire class, Adapted Physical Education

(APE) teachers need support in the classroom, especially by their educational leaders. Physical Education (PE) teachers and principals who encourage and guide one another in achievement work well together. The burden of teaching Physical Education (PE) can be reduced when educational leaders such as the Principal and PE teacher work together to keep the peace. Relationships between Physical Education (PE) and their principals can provide them strength and knowledge. Participant “A” mentioned that Physical Education (PE) teachers may endure unusual levels of stress if they are not given appropriate assistance in the classroom and training on how to connect with students. Moreover, dealing with personal stress and kids who have experienced stress can make the school environment frustrating for teachers; educational leaders need to be cognizant of this to better support Physical Education (PE) teachers. Ultimately, Physical Education (PE) teachers can realize that they are valued as more than just a body to fill space thanks to an educational leader’s sincere efforts to communicate with them.

Participant “D” indicated that teachers feel appreciated by the sacrifices they make to meet the learning needs of students with disabilities in Physical Education (PE) classes because educational leaders and the principal’s honest efforts demonstrate that they are not alone and have support. Therefore, together, principals and teachers have a crucial role in helping students succeed. Physical Education (PE) teachers and school principals working together can give children the necessary collaboration and professional relationships to improve their ability to learn and develop. Moreover, rural New Hampshire public school principals who purposefully choose to return each year to carry out the school’s goal might inspire Physical Education (PE) teachers to follow suit by showing a dedication to the institution and, more significantly, to the kids and their families.

In addition, Physical Education (PE) teachers and principals collaborate and assist one another to ensure the success of the school; their connection sets the bar for the institution.

Participant “J” indicated that they did not have a great connection with their educational leader at the school. Perhaps, each Physical Education (PE) teacher will view help differently, and a principal’s level of familiarity with the faculty may influence how they provide support to PE teachers. It is quite possible that principals who have strong teacher retention rates, value, and treat their staff with respect. Therefore, as an educational leader, principals need to make Physical Education (PE) teachers, and especially, paraprofessionals feel valued. Ultimately, this appreciation may boost Physical Education (PE) teachers and paraprofessionals morale and persuade them to continue their hard work and stick with the school.

Participant “I” indicated that they have the feeling of being treated inferior by other subject area teachers because other teachers view Physical Education (PE) as an elective and not a common core subject, therefore, PE is not as important as a subject such as Math or English. Therefore, a professional relationship between Physical Education (PE) teachers, common core teachers, educational leaders, and administrators fosters cooperation and increases participation. In addition, mutual respect fosters a cozy connection between educational leaders and Physical Education (PE) teachers and promotes a welcoming environment for the sharing of thoughts and opinions, especially when it relates to students with disabilities in PE. Participant “I” believes that when Physical Education (PE) teachers, educational leaders, and common core teachers recognize the importance of their role as educators when they are appreciated when there is mutual respect between them and principals. Ultimately, principals will remain open and honest in their engagement with their Physical Education (PE) teachers and common core teachers if a culture of mutual respect is established and upheld at the school.

Participant “G” remarked that through their involvement, Physical Education (PE) teachers can gauge the level of the school principal’s support. Therefore, the school’s environment and work culture can be adjusted by the educational leader to assist Physical Education (PE) teachers and consider the diversity of their faculty. Moreover, to further improve the standard of education that students with disabilities receive in Physical Education (PE), the educational leader sets the commitment to school improvement, which is subsequently upheld by the PE teachers. Additionally, the engaging and encouraging educational leader keeps Physical Education (PE) teachers motivated, ensuring that they are prepared and devoted to giving students with disabilities an excellent education.

### **Mentorship**

Participant “F” stated that they felt “alone” and working on an “island” their first year as a Physical Education (PE) teacher at their school, since the gym’s location was in the back of the school building and very rarely would they interact with other teachers or the school’s administrators. Therefore, peer support, along with support from the school administration, is a key factor in whether a Physical Education (PE) teacher feels appreciated, involved, and included within the school itself. Participant “F” suggested that a mentorship program could be the most popular form of peer assistance that could be made possible by educational leaders at the school, thus creating a professional environment that is infused with a spirit of collaboration, fellowship, and growth.

Participant “F” indicated that at another school that they worked at in New Hampshire, first-year teachers are typically given mentors, someone to guide them and offer encouragement as they embark on their teaching careers. In addition, veteran Physical Education (PE) teachers might also benefit from mentorships. Moreover, as teachers gain more experience, the

mentorship may take on different forms, but a Physical Education (PE) teacher's degree of support should remain constant.

Participant "F" and Participant "H" indicated that with little connection to their fellow teachers, Physical Education (PE) teachers spend most of their days in the gym which serves as their classroom. Physical Education (PE) teachers can know they are never alone since there is a support structure in place, however how alone they may feel. A shift that the researcher made during this time of interviewing and doing observations is that educational leaders can assign common core teachers to Physical Education (PE) teachers as mentors. Physical Education (PE) teachers in this study expressed that they feel alone in their classroom because there are no other colleagues present or located within their vicinity as it relates to the location of the gym where they teach PE classes. Therefore, mentor programs provide a sense of teamwork in the face of isolation; even though each Physical Education (PE) teacher must face the day alone, the school staff and leaders are a team.

Additionally, Physical Education (PE) teachers can relate to the difficulties their colleagues experience because they are aware of how being a teacher affects their colleagues' life. Veteran instructors can encourage their peers more effectively during difficult times and can also share in their victories because they have sometimes faced similar difficulties, especially experiences related to working with students that have disabilities. Subsequently, when there is a mentor-mentee interaction, the teachers should support one another in whatever way they can by offering advice, suggestions, and comments. Moreover, Participant "F" suggested that accessibility is essential to a successful mentorship because without the time to build a solid foundation, peers cannot profit from the relationship.

Furthermore, while still respecting each other's time and space, mentors and mentees in a partnership must make time for one another. As they develop their capacity to teach and learn, the pair must give each other the chance to grow and learn. Consequently, both sides make sacrifices in a mentorship, adding another more duty to their already full plate. Being a mentor involves coaching, motivating, providing stability, and exchanging knowledge and skills. The mentor and mentee can also hold one another accountable and network with other people in similar situations. As teachers collaborate and spend time together, mentoring can improve communication between them. Notwithstanding, veteran Physical Education (PE) teachers can be a mentor for a first-year classroom teacher in the school.

### **Title 1**

In a school, a leader's duties are countless and include supporting teachers, especially Physical Education (PE) teachers, ensuring that their needs are addressed and that their abilities are constantly maintained, and assuring that the PE teachers' and kids' safety in the building. During one of the interviews, the researcher learned about Title 1. Participant "B" stated that to give additional financial support to schools that primarily serve students from low-income communities, Title 1 schools were established in America. The Elementary and Secondary Education Act (ESEA), signed into law by President Lyndon Johnson, includes a provision for Title 1 schools (United States, 1965). Subsequently, the Elementary and Secondary Education Act of 1965 states that funding for Title 1 schools is intended to ensure equitable access to qualified educators who can deliver high-quality instruction in all schools (United States, 1965).

Additionally, Participant "B" mentioned that school leaders and administrators such as SAU Superintendents and Principals can leverage Title 1 to obtain funding and resources for Adapted Physical Education (APE) equipment, supplies, and even additional support staff such



as paraprofessionals. According to the U.S. Department of Education, Title 1 was created to close achievement gaps and ensure that disadvantaged kids receive a fair but excellent education. Moreover, a Title 1 school could use funding to encourage students in Physical Education (PE) to learn and concentrate on the needs of the students to narrow disparities with strong leadership supporting great PE teachers. Notwithstanding, students are better prepared for a bright future with an education that enables them to reach or surpass scholastic milestones.

The federal poverty census data is used to determine which schools are eligible for Title 1 funding. The amount of money a school will get depends on how many low-income pupils attend there. Notwithstanding, while paraprofessionals as an assistant teacher, supports and oversee students, help instructors, and add new activities to Physical Education (PE) classroom programs or provide managerial advice for instruction, PE teachers can instruct with the aid of Title 1 programs.

Participant “A” stated that their school is notorious for putting students into Physical Education (PE) classes when there are gaps that need to be filled in the student’s schedule. Physical Education (PE) essentially becomes a dumping ground for students and class sizes grow and become overcrowded with too many students. However, to reduce class size, Title 1 funding may be utilized to hire more paraprofessionals and instructors. Notwithstanding, the success of everyone at the school depends on the leadership of the school, particularly the principal. In addition, Participant “F” stated that they believe a Physical Education (PE) teacher’s commitment appears to be correlated with their view of leadership and the school. Therefore, the Principal as an educational leader needs to intervene in situations such as this one to make sure that Physical Education (PE) classes do not grow to unmanageable numbers.

Moreover, Participant “E” stated that one of the barriers to teaching students with disabilities in Physical Education (PE) class is the absence of paraprofessional support in the gym. Ultimately, Title 1 schools and educational leaders could potentially position themselves to retain favorable paraprofessionals and assistant teacher retention by making a sensitive judgment regarding teacher retention and using Title 1 resources that are available. In addition, educational leaders can strategically level the playing field financially for schools since Title 1 schools are frequently in rural, low-income neighborhoods and frequently lack access to everything needed for success.

### **Personal Learning, Shifts, and Transformations as a Scholar**

The researcher during this study transformed as a scholar, particularly after conducting the first interview with Participant “F” by realizing that non-disabled students need to slow down for other kids in the class that have disabilities. Participant “F” stated in the first interview:

“Um, a second barrier I would say is like, how do I, how do I put this, is educating students on how to coexist with other students with disabilities. To just put it bluntly, so when, when a class comes in and they're ready to go, and you've got a bunch of athletes and kids that just wanna play and just go at it, and you've got a student or two who can't keep up at that pace, it's hard to get through to the kids that they might need to like slow down or take a step back, or be helpful to a kid that isn't able to keep up at their pace.”

This really shows how hard it must be to “regulate” such a class that is composed of students with various abilities. Perhaps additional possibilities for competitiveness, social interaction, and recreation are required to alter the attitudes of non-disabled students about what is achievable and attainable for students with impairments.

Adaptations to the instructional model in the subject of Physical Education (PE) necessitate an understanding of factors relating to the kind of handicap each learner has and the effects that their disabilities have on the use of conventional educational models. Therefore, the demand for Adapted Physical Education (APE) successful implementation and practice in rural schools where it exists is a result of the expanding population of students who require support services in public schools and the increased emphasis on enhancing services to improve outcomes.

### **Implications for the Future**

Similar to how the seasons change in New Hampshire, Adapted Physical Education (APE) too offers new chances and opportunities for change and improvement following this study. In addition, the numerous and persistent challenges and barriers mentioned here require further investigation to identify their core causes and take action to remove or decrease them. Several of the participants in this study cited lack of paraprofessional support as a key barrier to effectively teaching Physical Education (PE) to students with disabilities. In some cases, the Physical Education (PE) teacher had no assistant teacher or paraprofessional in the class to help facilitate activities and help with engaging students in the class. In the same vein, some of the participants in this study asserted that it would be extremely helpful if paraprofessionals and assistant teachers attended and completed professional development and training on how to effectively assist Physical Education (PE) teachers in class when there is a student with a disability present.

Future studies may want to refine to include more extensive interviews with Adapted Physical Education (APE) teachers and students to gain a better understanding of their perspectives on the barriers that exist when addressing the issues that arise from social justice

and inclusion. Moreover, future research on this subject must collect data that takes into consideration the nature of factors and the effects of identifying outcomes related to the ideas of success and failure for specific disabilities in Physical Education (PE), sampling participants from urban and suburban areas of New Hampshire, and studies that look at residential, private, and charter schools in New Hampshire. The training and professional development of teachers may also be the subject of future recommendations and studies. Moreover, examining participants in New Hampshire that already have obtained their Certified Adapted Physical Educator (CAPE) license.

Nearly all the participants in this study stated that their biggest and hardest disability to work with in the Physical Education (PE) classroom is with students that have behavioral issues and Social Emotional Learning (SEL) challenges. Perhaps, teachers will have the knowledge and assurance to modify their instruction to meet the requirements of physically challenged children and students that have Social Emotional Learning (SEL) disabilities once they become Certified Adapted Physical Educators (CAPE) and earn this credential. Moreover, Physical Education (PE) teachers would likely benefit from additional training, instruction, and learning of social-emotional skills with support for generalization across settings, such as participation in a social-emotional skills group in PE that includes instruction, modeling, and practice in social pragmatics, social problem solving, working in a group, and emotional awareness.

This study lays the groundwork for future investigations into Adapted Physical Education (APE) in New Hampshire's educational setting, as well as adjustments, modifications, and resources to APE in rural public schools. More studies that focus on the challenges and barriers highlighted in this study and are conducted from the viewpoint and perspective of children with disabilities themselves are needed. In addition, studying the implementation of a program to

remove obstacles and barriers, evaluating its efficacy, and looking at the recognized facilitators of physical activity for kids with disabilities in Physical Education (PE) are other potential implications for the future. Moreover, the sample size for this study was relatively small, and this study only focused on rural public schools in New Hampshire. Ultimately, future studies on physical activity for children with limitations, disabilities, and impairments is required.

Lastly, although teacher opinions and perceptions are a crucial factor, it would also be beneficial to research students' and parents' perspectives as well as those of administrators, paraprofessionals, and special education directors; not only in the state of New Hampshire but as well as neighboring New England states such as Maine, Vermont, Massachusetts, Rhode Island, and Connecticut. Learning more about students' motivation when participating in Physical Education would be beneficial to Adapted Physical Education teachers that work with students that have disabilities. Specifically, it would be advantageous to ask parents how satisfied they are with Adapted Physical Education (APE) at their child's school and how much support they give their child in Physical Education (PE). These two groups could offer valuable intimate knowledge about the benefits and drawbacks of APE programs.

In conclusion, future studies that examine online Physical Education for students that have disabilities would be helpful. Researching a fully online Adapted Physical Education (APE) practicum class would be a step in the right direction, even though movement-based online APE classes would be challenging to envisage. Additionally, it would be most auspicious if Physical Education (PE) teachers in New Hampshire were compared to educators in other states, such as the 14 states that require that PE teachers obtain their CAPE certification to teach students with disabilities PE. This data would provide important information about the additional barriers and challenges of Adapted Physical Education (APE).

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## **Appendix A: Recruitment E-Mail**

Greetings,

My name is Aaron Thompson, and I am enrolled in the Doctor of Education degree program at Southern New Hampshire University. I am conducting a research study on the lived experiences of Adapted Physical Education teachers in rural public schools in New Hampshire (K-12). Participation is completely voluntary, and the participants' answers will be anonymous.

I am asking for your assistance in identifying any potential Physical Education (PE) teachers as a participant in your school district for my study that meets the following criteria:

- 1) possess a valid New Hampshire teaching credential in Physical Education;
- 2) have at least one year of Physical Education teaching experience in your district; and
- 3) have at least one student with a disability enrolled in a Physical Education (PE) class.

The participation in my study will consist of confirmation and consent to participate in the study, two interviews, one observation, and collection of documents related to teaching physical education. The consent form verifies their willingness to participate in the study and reiterates the voluntary participation, providing them with the opportunity to opt-out of the study at any time without penalty. The first interview will be conducted face-to-face, the observation will last one class period, and the second interview will last approximately 30-minutes and participants will have an option to do the second interview online via Zoom. After completion of the interview, a transcript will be created and e-mailed to the physical education teacher to verify authenticity and accuracy.

### **Assurances Statement:**

Participants will always be protected during the study by the researcher using a coding number system, no names will ever be used. The information gathered from the participants will also be stored on a software password-protected system.

If you have any potential participants for my study, please reply to this e-mail and include their contact information. Upon receipt, an additional email will be sent to the potential participant, providing them with the consent form and link to the survey. Participating in my study will help students, teachers, and administrators with improving physical education for students with disabilities.

If you have any questions, please do not hesitate to contact me at [aaron.thompson1@snhu.edu](mailto:aaron.thompson1@snhu.edu).

Thank you for your time.

Aaron Thompson

EdD Student

Southern New Hampshire University

## **Appendix B: Letter of Consent**

Welcome to my research study!

Thank you so much for your time. My name is Aaron Thompson, and I am a doctoral student at Southern New Hampshire University. I am in the midst of my research for my doctoral dissertation. I am interested in the ways in which Physical Education (PE) teachers work with students with disabilities in General Physical Education (GPE). I am collecting data and would appreciate your help and time in completing this survey. At the end of the survey, you will be asked if you would like to participate in an interview. Both the interviews and observations are voluntary. If you are chosen for the interview, the interview will take place at your school with me, the principal investigator. All your help is truly appreciated!

You have been selected to participate in my research study because of your role as a PE teacher. I am interested in understanding the impact that inclusion and mainstreaming have within the GPE setting. Please be assured that your identity will be kept entirely confidential and will be combined with other districts to create an overall understanding of the challenges and barriers that exist when including students with disabilities in GPE.

The goal of the study is to acquire information on the current challenges and barriers that New Hampshire Physical Education teachers encounter on a daily basis. Likewise, one of the objectives of the research is to identify what is working well in your PE classes. This will ultimately support students and teachers as they face the challenges of inclusion. My hope is that lives will change for the better by creating an awareness of the resources needed and advocating for proactive services. At the completion of my dissertation, my next steps will depend on the results. If needed, I hope to raise responsiveness on the possible educational implications that students with special needs will have on the classroom while proactively helping teachers learn best practices regarding APE. Some of these findings may be used in various presentations and publications. The survey will take you less than 5 minutes to complete. You have the right to withdraw at any point during the study, for any reason, and without any prejudice. If you would like to contact me to discuss this research, please email me at [aaron.thompson1@snhu.edu](mailto:aaron.thompson1@snhu.edu).

## **Appendix C: Informed Consent Agreement**

Project Title: Adapted Physical Education: Perspectives of Physical Education Teachers in New Hampshire.

**Please read this consent agreement carefully before you decide to participate in the study.**

**Purpose of the research study:** This study seeks to explore the phenomenon of Adapted Physical Education (APE) teachers in the state of New Hampshire. The purpose of this qualitative study is to explore the barriers and challenges that exist when working with students that have limitations and disabilities. It is hoped that the knowledge gained from this study will add to research on Adapted Physical Education (APE), specifically towards diverse learners.

**What you will do in the study:** As a participant in the study, you will be given details regarding the research and an opportunity to consent. You will be interviewed by a researcher in regards to your involvement and experience within your PE classes as it relates to Adapted Physical Education (APE). You will also be observed for one class period. The observer will be focused on teacher interactions as it relates to a student or a group of students that have disabilities.

**Time required:** Each of the two interviews will last no more than 60 minutes. The observation will run the extent of one class period.

**Risks:** There are no anticipated risks in this study.

**Benefits:** There are no direct benefits to you for participating in this research study. The report from this study will be made available to you.

**Confidentiality:** Participant's information will be kept private and confidential. The data will be collected consisting of recorded text and shared documents only. Your information will be assigned a code number. The list connecting your name to this code will be kept in a locked file. When the study is completed and the data has been analyzed, this list will be destroyed. Your name will not be used in any report.

**Voluntary participation:** Your participation in the study is completely voluntary.

**Right to withdraw from the study:** You have the right to withdraw from the study at any time without penalty.

**How to withdraw from the study:** To withdraw from the study, simply notify Aaron Thompson at [aaron.thompson1@snhu.edu](mailto:aaron.thompson1@snhu.edu).

If you have questions about the study or your rights in the study, please contact Aaron Thompson at [aaron.thompson1@snhu.edu](mailto:aaron.thompson1@snhu.edu) or [irb@snhu.edu](mailto:irb@snhu.edu).

Aaron Thompson  
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2500 North River Road  
Manchester, NH 03106  
aaron.thompson1@snhu.edu

Agreement:

I agree to participate in this study (please check one): YES \_\_\_ NO \_\_\_

Participant's Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Researcher's Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

You will receive a copy of this form for your records.



## Appendix D: Semi-Structured Interview Questions

adapted from Hodge & Haegele (2018)

### Sequence of Interview

#### Overview of Interview

*To simplify note taking and be considerate of your time, I would like to audio tape our conversation today. Per your signed consent form, only the researcher will have access to these audio files. These audio recordings will be destroyed after the completion and publication of my dissertation. Furthermore, per your signed consent form, all information will remain confidential, your participation in this study is voluntary and you may stop at any time if you do not feel comfortable with your participation.*

*This interview is scheduled to last no longer than one hour. During the interview, I have several questions that I would like to cover.*

#### Introduction

*Thank you for your willingness to participate in this study. I believe that you possess important experiences that will provide a valuable perspective on helping other Adapted Physical Education (APE) teachers. My research project focuses on the lived experiences of New Hampshire physical educators. I am interested in learning more about the challenges and barriers you have faced as a Physical Education (PE) teacher, and I would like to highlight what you are doing well to adapt your curriculum and classes for students with special needs. My study does not aim to evaluate your proficiency as a physical educator.*

First Interview Questions:

1. Which gender do you identify with?
2. Are you a certified Physical Education Teacher in New Hampshire?
3. Are you currently a Certified Adapted Physical Educator (CAPE)?
4. What school type do you teach in (Elementary, Middle, and/or High School)?
5. What is the highest level of education you have completed?
6. Have you completed any college level coursework related to Adapted Physical Education? If so, how many classes and credit hours?
7. How many years of experience do you have teaching Physical Education (PE)?
8. Name, position, and history/experience of the participant at the school:
  - a. Describe your current position and history with this school.
  - b. Tell me about what led you to this school and why you chose to leave your previous school to come here.
9. What are the challenges and barriers that you believe exist in Physical Education when including students with disabilities in your class(es)?
10. How has educating students with disabilities in Physical Education (PE) classes influenced or improved your lesson preparation, teaching, or effectiveness?
  - a. Is it easier or more difficult for you?
11. During the regular school year, do you feel your school provides you with the proper material resources/equipment to work with students with disabilities in PE?
12. What potential opportunities exist to strengthen Adapted Physical Education (APE)?
13. Organizational obstacles and barriers to innovative behaviors:
  - a. What experiences have you had in this organization that have hindered you from developing and implementing new/innovative ideas?

14. When teaching Physical Education (PE) to your students, how do you differentiate and accommodate your instruction to meet students' needs?
15. Are there any successful practices for working with students with disabilities that you wish to highlight?
16. What is the most important aspect of teaching students with disabilities PE?
17. Participants' perceptions of impact of leadership:
  - a. In what ways do you feel supported by administrators to carry out your work effectively and/or try new methods of instruction?
  - b. In what ways does the culture of this organization foster innovative thinking and behavior?
  - c. In what ways have you noticed leaders in your organization fostering a culture of innovation as it pertains to PE? Can you give any specific examples?

Member Checking (After first interview is completely transcribed)

1. Does all the information contained in this transcript reflect your experiences accurately?
2. Is there anything you would like to add to clarify any of your original responses?
3. Is there anything that you would like to remove to clarify any of your original response?

Questions for Second Interview:

1. What has been the most challenging as a rural PE teacher? Why? What have you done about it?
2. How has the context of your teaching environment affected your teaching? (e.g. class size, time of day, and demographics)?
3. Who has had the most influence on your experience and desire to teach Physical Education (PE) and teaching students with disabilities?
4. Please describe your experience with your teacher preparation program coursework as it relates to APE and working with students that have special needs and physical limitations.
  - a. Based on your education and training, how effective and confident are you in your ability to teach students with disabilities Physical Education?
  - b. If the state of New Hampshire made it a requirement for Physical Education (PE) teachers to become Certified Adapted Physical Educators (CAPE) how would you feel about that? Explain the pros and cons.
5. Is there anything else you would like to add to describe any challenges or barriers you have experienced when teaching students with special needs?

Member Checking (After second interview is completely transcribed)

1. Does all the information contained in this transcript reflect your experiences accurately?
2. Is there anything you would like to add to clarify any of your original responses?
3. Is there anything that you would like to remove to clarify any of your original response?

# ADAPTED PHYSICAL EDUCATION: PERSPECTIVES OF PHYSICAL EDUCATION TEACHERS IN NEW HAMPSHIRE

AARON THOMPSON

Southern New Hampshire University

## Abstract

The purpose of this study was to learn about the obstacles and barriers of teaching Adapted Physical Education (APE) from the viewpoint of Physical Education (PE) teachers in rural New Hampshire public school's grades K-12. Two research issues are driving this project: What challenges and barriers do Physical Education (PE) teachers experience when including students with disabilities in general physical education (GPE)? and What are the experiences of New Hampshire Public Schools' Physical Education (PE) teachers to implement and adapt their classes for students with special needs? The study included interviews, observations, and the collection of artifacts and documents of Physical Education (PE) teachers in New Hampshire to investigate these concerns. There were three objectives: (a) show the obstacles and barriers faced by Adapted Physical Education (APE) educators, (b) give a reference for Adapted Physical Education (APE) to use in future studies, and (c) provide advocacy and inspiration for Adapted Physical Education (APE) teachers.

**Keywords:** *Barriers, inclusion, class size, equipment*

## Introduction

In 1975, Congress passed Public Law 94-142, ensuring that all students with disabilities in the United States have access to a free and public education. In addition, the Individuals with Disabilities Act (IDEA) of 2004 covers all educational settings, including Physical Education (PE).

In short, these laws stated that all children with disabilities must have whatever is necessary to meet their needs, whether it is special adapted Physical Education (PE) classes, "regular" PE classes, building access, necessary transportation, playing areas, gyms, ramps, equipment, and so on. While these laws appear well-intentioned on the surface, problems arose from the start. For example, no funding was provided for any of the mandates in the bill.

Moreover, according to the United States Department of Education's Institute for Education Statistics, there are approximately 6.4 million students with disabilities between the ages of 3 and 21, accounting for roughly 13% of all students (2019). Not that long ago, Physical Education (PE) used to be centered on the idea of creating standard, uniform physical requirements for everyone, which went against the idea of each person's individual development (Adyrkhaiev & Adyrkhaieva, 2017). Now, however, the fundamental purpose of Adapted Physical Education (APE) is to guarantee that each child receives Physical Education (PE) services that are tailored to his or her specific learning needs (Bruno, 2020). This notion of normalization, which became popular in the 1960's, reflects this shift in perspective from a focus on rectifying disabilities to inclusion and value (Samalot-Rivera et al., 2017).

Inclusion, a movement in education aimed at increasing engagement of students with disabilities in general education programs and supporting their needs, is a key problem in the United States (An & Meaney, 2015). However, while the concept of inclusion is becoming more common, it is still controversial with parents, administrators, special education, and physical education teachers criticizing it (Byrnes, 2002). Furthermore, when it comes to the inclusion

of children with disabilities, Physical Education (PE), like all other curriculum areas, continues to encounter new problems and opportunities (Kirk et al., 2006). Physical Education (PE) teachers that want to implement a worthy Adapted Physical Education (APE) program to students with disabilities can be hampered by any number of variables such as limited supplies and equipment (LeFee, 2007). Attitudes, low expectations, and teacher apathy, according to many experts, are key challenges and major barriers to education students with disabilities in Physical Education (PE) (Lieberman, Houston-Wilson & Kozub, 2002). Lack of time, suitable programming, and budget issues are further obstacles to successful inclusion (Lieberman et al., 2006). On the other hand, students and educators can benefit from inclusion. For instance, students without disabilities can learn to accept individual diversity as well as obtain a different perspective on life's problems (Block, 2016).

## Purpose

The purpose of this paper is to answer the following questions:

1. What challenges and barriers do Adapted Physical Education (APE) teachers experience when including students with disabilities in general physical education?
2. What are the experiences of rural New Hampshire Public Schools' Adapted Physical Education (APE) teachers to implement and adapt their classes for students with special needs?

## Methods

A design of study, according to Creswell (2013), has three components: research design, research methods, and inquiry strategies. A research design, according to him, is a proposal or plan for conducting research. Furthermore, a problem, a question, or apt topic is the beginning point for numerous research projects (Ravitch & Carl, 2019). A qualitative study is the research design that has been chosen. Qualitative research is a method of investigating and comprehending the meaning that groups or individuals attach to a human or social issue (Creswell & Creswell, 2018). Qualitative research allows the researcher to develop a more comprehensive, complete overview by analyzing words, reporting extensive participant perspectives, and conducting the study in a natural setting (Creswell, 1998).

Qualitative researchers frequently gather data in the field, at the location where participants are confronted with the problem or issue under investigation (Creswell & Creswell, 2018). This is frequently referred to as the natural setting. The setting for this study is rural New Hampshire,

public schools, grades K-12, and Physical Education (PE) teachers that currently have students with special needs that are enrolled in the same classes alongside their non-disabled peers. Public charter schools and private schools are not part of this study to provide an in-depth analysis of the traditional public-school setting. In terms of Physical Education (PE),

the natural setting can include gyms, playgrounds, weight rooms, cafeterias, auditoriums, parks, and aquatic centers. The state of New Hampshire is divided into the following ten counties: Belknap, Carroll, Coos, Cheshire, Hillsborough, Merrimack, Rockingham, Strafford, and Sullivan. Within these ten counties there are 130 school districts, known as School Administrative Units (SAU) offices.

Randomized sampling was conducted to identify participants. In the random number method, the researcher first created a chart which listed all the rural public SAU's in New Hampshire alphabetically. The researcher then assigned every individual SAU a number. Using the random number generator, the researcher randomly picked a subset of the population. Specifically, the researcher used the random number function (RAND) in Microsoft Excel to generate the set of random numbers. In addition, Microsoft Excel uses the Mersenne Twister algorithm to generate random numbers. The participants in this study were elementary, middle, and high school Physical Education (PE) teachers from rural New Hampshire public schools. The teaching experience of the participants ranged from three years to over 30 years. There was a total of 14 participants.

At the conclusion of the study, all audio recordings were permanently deleted. All paper copies of data collected were kept in a locked office for the duration of the study and destroyed by the author once the study was completed. To preserve the rights and privacy of participants, the researcher used honesty in reporting data, techniques, results, processes, and publishing status, as well as not falsifying, fabricating, or misrepresenting the data.

The study's validity will be strengthened through triangulation. To construct themes or categories in a study, researchers use triangulation, a validity technique in which they look for convergence among multiple and diverse sources of data (Creswell, 2014). This study used semi-structured interviews, observations, and the collection of documents and artifacts such as the teachers' syllabus, lesson plans, and the schools/teacher's website. Furthermore, individual students were not identified in the process of collecting data.

The coding strategy used for post interview analysis was derived from Saldaña (2021). This process includes, first, transcribing the conversation from the interview, and then use the coding technique developed by Saldaña (2021) of *in vivo*. The first step involved with *in vivo* coding consists of chronologically listing, clustering, and an outlining of codes (Saldaña, 2021). The second cycle coding methods included focused coding. Focused coding involves clustered codes that are integrated into their categories. In a phenomenological research study, this is an effective approach of coding the interview since it aids the researcher in summarizing the data, detecting themes and patterns while prioritizing and honoring the participants voice (Saldaña, 2021).

## Results

This phenomenological study focused on grades K-12 in rural New Hampshire Physical Education (PE) teachers. The



lived experiences of 14 Physical Education (PE) teachers working in rural public schools in New Hampshire were examined utilizing qualitative research methods. There was a significant gap in the research that currently exists in Physical Education (PE) and Adapted Physical Education (APE), especially in rural New Hampshire public schools.

The study results showed that rural public school Physical Education (PE) teachers experienced many of the same barriers and challenges when it comes to including students with disabilities in general physical education classes. The participants in the study reported that their biggest barriers were adequate physical space, limited equipment, no funding or financial support, lack of paraprofessional help in the classroom, oversized classes, and specific challenges when working with students that have Social Emotional Learning (SEL) disabilities. Physical Education (PE) teachers also reported that managing paraprofessionals, behavior management, and time management are some of their most challenging obstacles. Several of the participants in this study stated that they only could work with students in Physical Education (PE) class once a week, and if there is a holiday on the date they meet those students, it could be up to two weeks without students receiving Physical Education (PE).

One participant specifically stated that their three biggest barriers were time, paraprofessional support, and non-disabled students that have negative attitudes towards the students in the class that have disabilities. Another participant stated, "All right, so I'll be brutally honest. I'm going to tell you everything, so let's start with lack of paraprofessional support. We'll start there. Um, you know there's a shortage in the country of all educators right now. That shortage, I know, is affecting everyone and not just PE, but we'll start there because it's a fact that there's classes that come in with special needs students with no paraprofessional educator support that might have one in other places, but they don't necessarily always come to PE. The paraprofessional with that class or with that kid might

get pulled to another classroom somewhere else for the 40 minutes that kid comes to PE." Another participant remarked that the administrators at their school think there is a sort of mindset that students with special needs will just be fine in Physical Education (PE) because it is PE, and they can be active.

Another participant stated that she emphasizes to the students in her class on a regular basis that they need to be accepting of other students in the class that have disabilities and limitations. Participant "F" stated that this can be a struggle as a Physical Education (PE) teacher. She suggested that if she has somebody in class with autism, for example, and nobody wants to be their partner and nobody can get along because they cannot necessarily keep up or play at their level. Therefore, she insists that instead of having kids pick their own teams for games, since some students will not be willing to step up and work with a student that has a disability. She stated that she makes it a priority to explain to the student, so that they understand that we must make

this change, and still, sometimes the students still do not really get it or understand the reasoning behind being paired and partnered up with a student that has a disability. As a result, educators today understand the importance of improving students' learning chances through peer work and group projects that promote a deeper understanding of varied learner populations.



A rural Physical Education (PE) teacher in New Hampshire has the field and equipment set-up for students to play Spaghetti and Meatballs. The students used modified hockey sticks to hit the foam balls out of the hula hoops.

Some of the participants in this study reported that they have never had any issues with funding or obtaining equipment that they need to serve the needs of students with disabilities in their Physical Education (PE) classes. Many of the participants in this study have experience using modified equipment and modifying the rules of the game. Moreover, during this study, the researcher during interviews and observations noticed that Physical Education (PE) teachers are empathetic towards their students, which enables them to connect to them and demonstrate to them that they are aware of their lives outside of school. In addition, it was apparent that Physical Education (PE) teachers take pleasure in what they do and the students they work with are encouraged to continue doing it because it makes them happy. One participant stated, "Being able to improve a student's life is a reward in and of itself." Ultimately, Physical Education (PE) teachers could give back to others and the community while working under humanistic commitment.

## Conclusion/Implications

The idea that physical activity and exercise are good for everyone, even those with limited mobility and disabilities, led to the necessity for Physical Education (PE) programming for all students in public schools. Moreover, supporting fitness in rural public schools is mostly dependent on the creation of programming that takes into account the

involvement of all students by the Physical Education (PE) teacher. However, the creation of programming that promotes physical activity and fitness at a challenging level while incorporating adaptation for learners who need adapted ways to participate is one of the issues facing Physical Education (PE) teachers in New Hampshire.

The researcher employed triangulation to lessen bias, boost validity, and enhance credibility. Triangulation in this study consisted of document collection, observations, and a series of two interviews. The researcher observed teachers of Physical Education (PE) that made use of skill modifications, modified equipment, and specific equipment tailored to the requirements of the student. In addition, several documents were collected from Physical Education (PE) teachers in rural public schools across the state of New Hampshire, which included lesson plans, unit plans, and course syllabuses. Each participant was interviewed two times; the first interview was conducted in-person and the second interview online via Zoom.

All the Physical Education (PE) teachers in this study stated that they have adequate and sufficient administrative support; however, many of the PE teachers faced barriers and challenges when trying to work with students that have Social Emotional Learning (SEL) disabilities and behavioral issues.

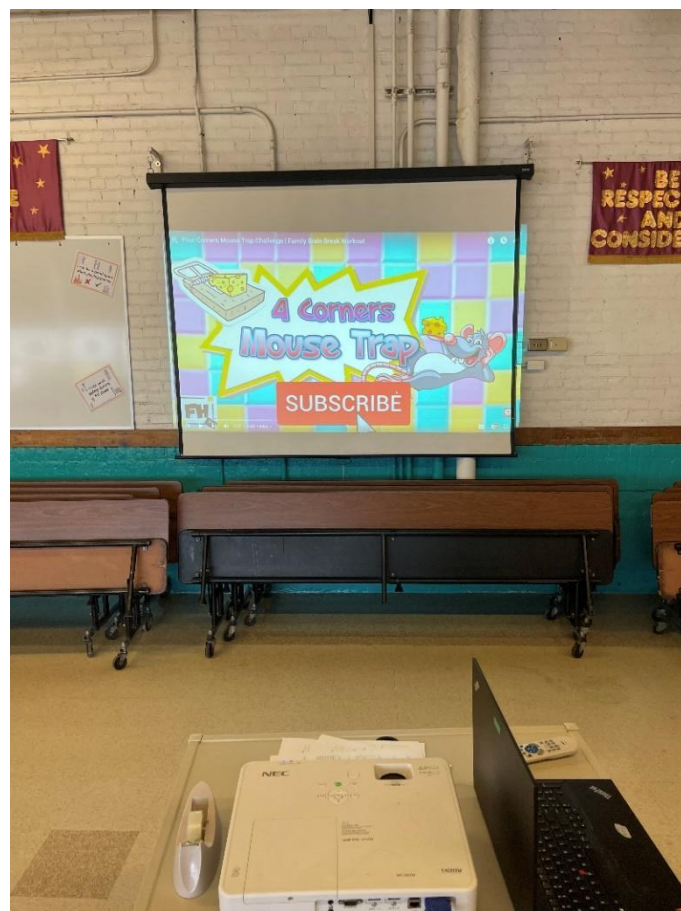
“Um, and we, we know it’s not always because of their disability, but sometimes, sometimes it is, is they, they’re not realizing the social cues around them, um, or things like that. So those are kind of the ones that I find more struggling” (Participant 2).

The research found that paraprofessional support is lacking, and, in some cases, it is completely non-existent in the PE classroom. Several of the participants in this study suggested that paraprofessionals need more training in Adapted Physical Education (APE) to better help students with disabilities in PE class.

“Those are the things that matter the most, that’s the hardest part with time trying to cram a lot into a little time but having to slow down to take care of that, uh, the para support would be more helpful, um, in those instances. And I wouldn’t, I’m going to add on to that having paras, uh, trained better.” (Participant 1)

One participant stated that sixth graders at their school do not attend Physical Education (PE) for the entire school year due to lack of staffing and scheduling conflicts.

“Yeah, so the sixth-grade class doesn’t have PE um, because of the UA schedule, and they need to take guidance as a sixth grader, which is kind of like the DARE program. Um, they get one UA bump each year. So sixth graders just happen to not have PE whereas like eighth graders don’t have, uh, music or bands. So unfortunately, the sixth graders do not have PE with me.” (Participant 3).



One of the Physical Education (PE) teachers used a projection screen and interactive technology to play the game '4 Corners Mouse Trap' in the cafeteria/gym.

## Future Recommendations

The numerous and persistent challenges and barriers here require further investigation to identify their core causes and take action to remove or decrease them. Several of the participants in this study cited lack of paraprofessional support as a key barrier to effectively teaching Physical Education (PE) to students with disabilities. In some cases, the Physical Education (PE) teacher had no assistant teacher or paraprofessional in the class to help facilitate activities and help with engaging students in the class. In the same vein, some of the participants in this study asserted that it would be extremely helpful if paraprofessionals and assistant teachers attended and completed professional development and training on how to effectively assist Physical Education (PE) teachers in class when there is a student with a disability present.

Future research on this subject must collect data that considers the nature of factors and the effects of identifying outcomes related to the ideas of success and failure for specific disabilities in Physical Education (PE), sampling participants from urban and suburban areas of New Hampshire, and studies that look at residential, private, and



charter schools in New Hampshire. The training and professional development of teachers may also be the subject of future recommendations and studies. Moreover, examining participants in New Hampshire that already have obtained their Certified Adapted Physical Educator (CAPE) license. Perhaps, teachers will have the knowledge and assurance to modify their instruction to meet the requirements of physically challenged children and students that have Social Emotional Learning (SEL) disabilities once they become Certified Adapted Physical Educators (CAPE) and earn this credential.

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**Aaron Thompson** is a doctoral student at Southern New Hampshire University in Manchester, New Hampshire. He has over a decade of teaching and coaching experience. He is currently teaching Physical Education (PE) at a rural New Hampshire public school for grades 6-12.

**\*\*Thank you to all the hard working and dedicated Physical Education (PE) teachers in New Hampshire who participated in my study and work relentlessly to help improve the lives of students with disabilities in Physical Education.**

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## Appendix F: Observation Field Notes and Pictures

### Data Collector: Aaron Thompson

**Site: Elementary/Middle School (K-8)**

**Location: Southeast New Hampshire**

**Teacher: Participant 1A**

**Date: Tuesday, September 20, 2022**

**Start: 10:30 a.m.**

**End: 11:15 a.m.**

Background: The students in this class participated in two games/activities. The first game is called, “Toss three and go” and the second game is called, “Spaghetti and Meatballs.” The equipment used for these two activities included foam balls, hula hoops, and modified hockey sticks made by a company called Flyhouse. The modified hockey sticks have padding on the bottom of the stick and the hockey stick is shorter in length.

Observation: Physical Education (PE) class starts at 10:30 a.m. in the gym/cafeteria. The students’ classroom teacher brings the students into the gym to meet with the PE teacher for class. Class starts by the students sitting in a circle at the half court line of the basketball court in the middle of the gym. The teacher reviews the rules, expectations, and emphasizes safety. Teacher checks for understanding of the students by asking them to do thumbs up, indicating that they were listening to the instructions. One student was standing, not following directions. The teacher used humor and said, “I’m using the force to have you sit down.” After meeting inside, the students go outside with the teacher to the baseball/soccer fields. Once the class arrives at the fields, the teacher says, “stand like a statue” and gives all of the students in the class a foam ball.

The teacher reviews the activity and rules with the students. She notices some of the students are not paying attention, and she states, “One, two, three, come over and take a knee.” Once the students have taken a knee the teacher reviews the rules and objectives of the game “Toss three and go.” On the teacher’s command, students begin playing the game. Students are using the foam balls which were assigned to them to throw them in the air and catch them. Once the student has tossed the ball into the air three times, they are then able to move around and relocate to a different spot on the field. Once this activity is done, the teacher has the students run to the other side of the field as she sets up the equipment for the next activity. When students return to her, after running, the teacher gives the students a break to get water.

A couple of minutes pass as students drink water from their water bottles. The teacher then begins to explain the rules and objectives of the next game, “Spaghetti and meatballs.” The teacher uses the students’ first names to address each student in the class. Teacher notices some of the students are

distracted, and says, “Give me 5.” This is a cue for each student to raise their hand to indicate they are listening. Teacher gives four of the students in the class modified hockey sticks. She instructs the students that they can only hit one foam ball out of the hula hoop at a time. Teacher notices again that some students are not paying attention and listening to the instructions. Teacher says, “Wiggle your ears, touch your belly button, wiggle your nose.” The students begin following the teachers’ cues indicating that they are listening. Teacher uses a handheld clicking device that makes a beeping noise, which indicates that the game is beginning. The students play the game for approximately 5 minutes and she has them regroup together in a circle at approximately 10:56 a.m. Teacher has two students take a break and sit at the fence for not following the rules.

At the end of the second round of playing, the teacher uses the clicking device that she’s holding in her hand to make a noise that indicates that the second round is done. Teacher says, “Freeze.” She reviews the expectation of being safe while playing the game and reassigns four new students the modified hockey sticks. Teacher states, “Everyone will get an opportunity to use the hockey sticks.” At approximately 11:03 a.m. the next round of playing the game begins. During each of the rounds of play, the teacher begins the round by positioning herself in the middle of the field where the game is being played. Throughout the duration of the game, she moves around to each of the spots where the hula hoops and foam balls are located. The teacher works with students individually on hitting the ball better and more efficiently and effectively.

At approximately 11:06 a.m. the teacher ends the game and meets with all of the students. The teacher states, “If I tap you on the head, you will collect the balls.” She taps four students on the head, and they start picking up the balls. The teacher then states, “If I tap you on the shoulder, you will collect the hockey sticks.” She taps four students on the shoulder, and they start picking up the hockey sticks. Finally, she says, “If I tap you on the elbow, you will pick up the hula hoops.” She taps four students on the elbow, and they begin picking up the hula hoops.

After all the equipment is picked up, the teacher has the students line up in a single file line at the corner of the fence to go back inside to the school where the gym is located. Teacher hands some of the students their water bottles as they are leaving the field. The class enters the gym at approximately 11:12 a.m. and the classroom teacher meets her students to take them back to her classroom. As the students leave the gym, the PE teacher gives all the student’s high fives. At approximately 11:13 a.m. the gym has no students, and the cafeteria staff begins setting up for lunch.

Photo 1: Spaghetti and Meatballs game





## **Data Collector: Aaron Thompson**

**Site: Middle/High School (6-12)**

**Location: Northern New Hampshire**

**Teacher: Participant 2B**

**Date: Monday, September 26, 2022**

**Start: 12:00 p.m.**

**End: 12:50 p.m.**

**Background:** The students in this class participated in a 5-minute warm up, followed by the game Scarf Tag. The second game that the students played is called Juggling Progression. The third activity that was planned is called Plate Spinning; however, there was not enough time in the class period to do this activity. The class ends with students participating in a choice of skill to work on.

**Observation:** Physical Education (PE) class starts at 12:00 p.m. in the gym. The teacher plays the song “You Can Call Me Al” by Paul Simon on her laptop as middle school students enter the gym for class. The teacher gives students 5 minutes to change into their workout clothes for class. The class has less than 15 students present. The students walk and jog a few laps around the basketball court to get “warmed up” for class.

After the students have finished their warm-up, they file into the bleachers and have a seat. The teacher says, “Eyes on me.” The teacher tells the students that this week they are starting a circus unit. The teacher describes the equipment that will be used for the different activities and games that will be played.

The teacher demonstrates the rules and technique needed to play scarf tag. The teacher puts a scarf in her pocket and shows the students how to properly and safely remove a scarf from another student's pocket. At approximately 12:09 p.m. the students begin playing scarf tag. The students spread out in the gym, standing within the basketball court lines. The teacher stops the game, and tells the students that if a student is sitting on the ground, they cannot grab her scarf. The teacher resumes the game and the students begin playing again. The teacher has the student only use half of the basketball court as the out of bounds lines to play the scarf tag game. Teacher walks in the middle of the students and puts her hand up above her head making a “T” for timeout. The students stop the game, and the teacher reiterates being safe. At approximately 12:14 p.m. there is one student that enters the gym late for class with another adult. The adult drops off the student for class and leaves the gym. The teacher walks over to the bleachers with the late student, picks up her laptop, and checks him in for class. The teacher is engaged in a direct conversation with the late student for approximately two minutes while the scarf tag game continues on half of the basketball court. The teacher is reviewing the rules of the game with the late

student, and then the late student enters the game with the rest of his classmates at approximately 12:17 p.m. The teacher picks another song and plays it aloud on her laptop. The teacher then states, “Two minutes.” The song ends at approximately 12:20 p.m. and the teacher states to the class, “Freeze.” She tells the class, “Everyone spread out.” “We are going to learn the first things, how to juggle, and we are going to start with the scarf that’s in your pocket.” She adds, “You’re going to toss it into the air, clap your hands once, and then catch the scarf before it hits the ground.” The teacher lets the students practice this skill/activity for a couple of minutes. The teacher then directs the students to pair up in groups of two and states, “Pair up.” She tells the class that one student in the group needs to stand directly across from their partner. She then tells them that one student is going to throw the scarf in the air, and both students will run to switch sides, and the student that didn’t have a scarf tries to catch their partner's scarf that was thrown into the air before it hits the ground. The teacher directs the students to stand approximately 10 feet from each other facing each other. One student in the class does not have a partner so the teacher pairs up with this student and demonstrates this activity with the class to see before they begin playing. The students continue playing this activity until the teacher stops them at approximately 12:36 p.m. The teacher ends the activity by saying, “Alright ladies and gentlemen, come over here, group up.”

At approximately 12:36 p.m. the teacher hands each of the students a hacky sack ball. The teacher stands in front of the students and demonstrates how to throw the hacky sack ball into the air and catch it with the same hand. After the teacher demonstrates this skill a few times, she tells the students to practice. The students practice this skill for approximately two minutes, and then the teacher tells the students to stop and gather up again near her. She gives the students an additional hacky sack ball, and the students practice with two hacky sack balls. The students practice this skill with both of their hands for a couple of minutes. At approximately 12:41 p.m. the teacher tells them to stop and sit in the bleachers. The students sit in the bleachers and the students watch the teacher as she demonstrates juggling three hacky sack balls. The teacher then allows the students to come out of the bleachers where they are sitting, and to grab an additional hacky sack ball, and practice juggling three hacky sack balls on their own. Some of the students are unable to juggle the three hacky sacks. The teacher walks over to one of the students that’s dropping the hacky sack balls and is unable to perform the skills. The teacher hands the student two scarfs, and takes away the hacky sack balls. The teacher helps the student throw two scarfs in the air, and practice these skills and the teacher provides advice and suggestions to the student to help them.

The teacher at approximately 12:45 p.m. tells the students to stop what they are doing, and to put away the hacky sack balls and the scarfs on the bleachers. The students turn in the scarfs and hacky sack balls. The teacher tells the students that they need to go back and change for their next class. At the end of class, the teacher gives students 5 minutes to change back into their school clothes. The students return to the gym at approximately 12:50 p.m. and the school bell rings ending the class period and the students

exit the gym. As the students are leaving the gym the teacher walks over to the observer/researcher and says, "That's my 7th graders."

Photo 1: Warm-Up Options

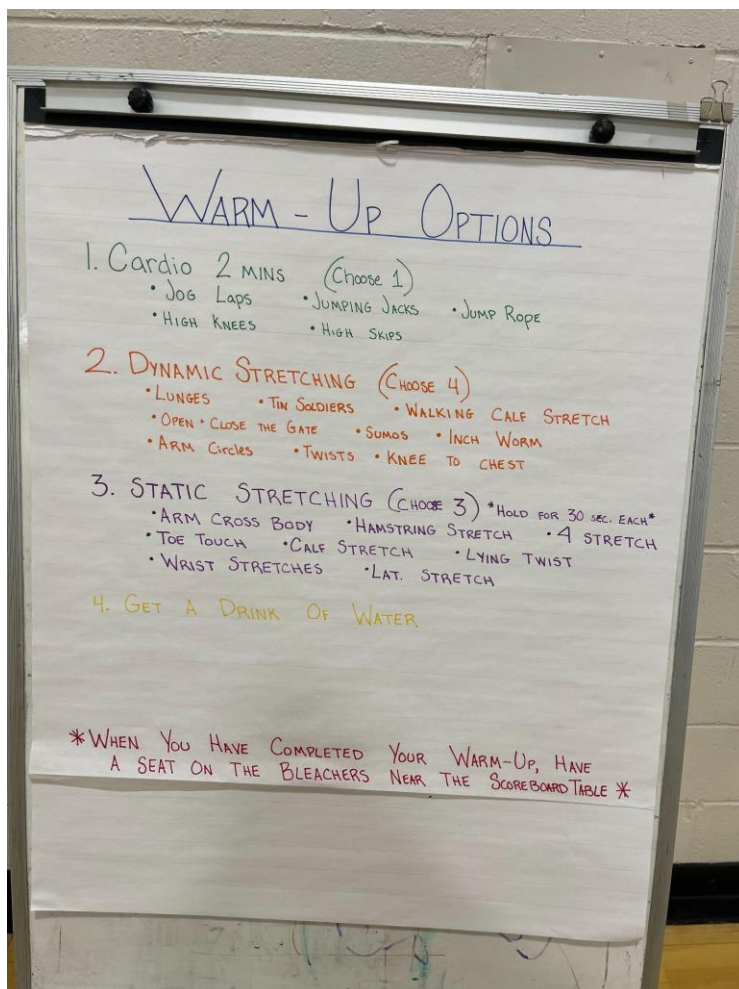




Photo 2: Equipment Used for Scarf Tag and Juggling Progression



## **Data Collector: Aaron Thompson**

**Site: Elementary School (K-5)**

**Location: Central New Hampshire**

**Teacher: Participant 3C**

**Date: Monday, October 3, 2022**

**Start: 8:30 a.m.**

**End: 9:15 a.m.**

**Background:** This week the school/PE teacher is doing, bring your parents to PE week. Teacher says that moms like to play dodgeball against their kids. For this class today, no parents showed up to participate in PE class with their child. Students played a game called Shark Island. There's less than 20 students present in class.

**Observation:** Physical Education (PE) class starts at 8:35 a.m. inside the gym. Teacher tells the researcher that he has two students with an IEP and one student with a 504 in this class. The students' classroom teacher brings the students into the gym to meet with the PE teacher for class. Class starts by the students sitting in their assigned spots on the gym floor near the entrance of the gym by the bleachers. The teacher starts playing the song "Don't Stop Believing" by Journey. The teacher tells the students to start warm-up and the students start running around the outside of the basketball court. After the students finish running for their warm-up, which is the duration of the song that is playing. The students sit back down on the floor at their assigned seats. The teacher walks over to the students and says the quote of today is, "I can accept failure, I cannot accept not trying." The teacher asked the students if they knew who that quote was from. One student says "Yoda." Teacher says, "That's a really good guess, but it is actually a guy named Michael Jordan." The teacher reviews the class expectations that are written on the white board, "Do your best, be nice, and be tough."

Teacher tells the students to do sit-ups or push-ups, and the teacher starts setting up equipment for class. Teacher drags a cushioned mat over to the center of the basketball court, puts a hula hoop with a foam ball inside the hula hoop near each of the four corners of the gym.

Teacher explains to the students that the mat in the middle of the gym is an island, and students have to grab "coconuts" which are the foam balls and bring them back to the island. The outside of the basketball court lines are the hospital. Teacher uses a small black trash can as a gift basket.

There are four sharks, students wearing a purple jersey are the sharks. If a student is tagged by a shark, they go to the hospital. The foam balls are used as the coconuts. Students pretend to drink the magic

coconut and they are then able to rejoin the game inside the basketball court. Students cannot throw a coconut, no matter what.

At approximately 8:49 a.m. an adult brings a student into the class and they begin walking around the gym while the teacher finishes explaining the rules of the game.

At approximately 8:53 a.m. the adult and student leave the gym. Teacher asked the adult, "Are you leaving?" The adult responds, "I'm sure we'll be back."

At approximately 8:54 a.m. the teacher asked the class, "Is there anyone that would like to start off the game as a shark?" The teacher tells the students to come onto the basketball court. There are several students sitting on the mat in the center of the basketball court.

Teacher tells the researcher that the student that was just in the gym is non-verbal autistic and occasionally comes into PE class to walk around the gym as a "movement break."

At approximately 8:55 a.m. the students begin playing the game. The teacher starts playing music, the song "Juke Box Hero" by Foreigner. The teacher has a microphone and talks over the speaker system in the gym, and reiterates the rules of the game. At approximately 8:59 a.m. the teacher says over the speaker, "Freeze. Anyone else want to be a shark now?" Four of the students take off their jersey and give it to four new students, so that they can be a shark for the second game. Teacher says, "Ready, set, go" and begins playing the song "Eye of the Tiger" by Survivor.

A student in a wheelchair asks the teacher if another student tags his or the wheelchair with the coconut, do they have to go to the corner where the gift shop is. The teacher says it only counts if they are tagged, and tagging the wheelchair doesn't count.

At approximately 9:09 a.m. the teacher says, "Freeze, I need four new sharks. I know there's some people that haven't done it yet." The students that are sharks give their jersey to four new students for the next game. Teacher tells one student that they have to wear the jersey properly and take it off of their head. Teacher says, "ready, set, go." Students start playing a new round of the game, and the teacher plays the song "Danger Zone" by Kenny Loggins. At approximately 9:14 a.m. the teacher states, "Unfortunately we are out of time, leave all the equipment where it is, take the balls outside of the hula hoops."

At approximately 9:15 a.m. the class ends. The teacher tells the students to line up on the black line and the students teacher meets them at the door to take them back to their classroom.



Image 1: Equipment used for the game Shark Island.



Image 2: Adaptive equipment/device used by one of the students in the PE class.





## **Data Collector: Aaron Thompson**

**Site: Elementary School (K-5)**

**Location: Southeast New Hampshire**

**Teacher: Participant 4D**

**Date: Monday, October 3, 2022**

**Start: 2:00 p.m.**

**End: 2:45 p.m.**

**Background:** The location for this class is in the cafeteria which the Physical Education (PE) teacher uses as the gym. There are less than 10 students in the class. The students play a game called Four Corners Mouse Trap followed by a bean bag tossing game/activity.

**Observation:** The Physical Education (PE) class starts at 2:00 p.m. inside the gym which is the cafeteria. The teacher has the Four Corners Mouse Trap game displayed on the projector screen at the front of the class, which is an interactive game that requires the students to move to different corners of the cafeteria for approximately 2-3 minutes and the students perform a series of physical exercise activities. At the end of the 2-3 minutes, the students rotate to a different corner of the cafeteria and perform the next series of exercises. Teacher starts the game by saying, "Go cheese."

The first group of students do a "sliding" exercise in which they shuffle to the next corner of the cafeteria. Galloping is the next transition activity. The following corner performs the exercise of squats with their arms and hands extended out in front of their body. At approximately 2:11 p.m. the teacher tells the researcher that this is his 2nd grade class.

At approximately 2:12 p.m. one of the students tells the PE teacher, "This is hard." The teacher responds and says, "I like how everyone tried hard" and "while you guys are coming down, sit down in the center of the gym." The students sit down in the middle of the gym and the teacher says, "I have a math question for you. What is three divided by nine?" The teacher then tells the students to stand up and line up in three different lines, and the three lines have to have the same amount of people standing in them. There are three lines with three students in each of the lines. The teacher says, "We're going to hop, skip, and leap for the next activity all the way down to the other side of the gym." The teacher puts cones at the other end of the gym and the students begin this activity. The teacher asks the students if they know what a leap is. The teacher then demonstrates how to properly perform a leap. After the teacher demonstrates how to do a leap, the teacher allows one of the students to demonstrate how to do a leap in front of the classmates. After the student demonstrates how to do a leap, the teacher asks the class what leg they are jumping off of and what leg they are landing on. The teacher then asks the class how far they are leaping.

As the students are leaping down the gym, the teacher asks the students what animals leap. One of the students says a dog, another student says a deer.

The teacher transitions to the next activity, and the first student in each line starts to leap towards the other side of the gym/cafe leaping towards the cone. Teacher says, go low or high enough to leap. Once all the students are at the cone, the teacher tells them to go back to where they started and there is a rope on the ground that they have to leap over to get back to where they started at the beginning of the lines.

At approximately 2:19 p.m. the students are told by the teacher to find a square on the ground that is a different color tile than the other gray ones. The PE teacher says, "focus on the lesson today."

Each student is standing on a darker gray colored square tile on the cafe/gym floor.

Teacher asks a student to read an activity off the white board which is at the front of the classroom.

Student says throw a bean bag and catch it.

Teacher says, "Oh yea, I have more rules." Don't throw the bean bags too high because it might hit the lights and get stuck in the medal beams. The teacher says don't put the bean bags in your mouth.

Teacher says I'm going to give you a bean bag, and we have to do things with tossing. We're going to learn some tricks, some stunts, we're going to learn at our own pace. You can add something to it to make it harder. If something is too hard we can make it easier. First, does everyone know that if I toss a bean bag up, how does my arm do? Teacher says this is an underhand toss, and it's called follow through.

Teacher demonstrates a proper throw with the bean bag to catch it and throw it up in the air in a straight line.

At approximately 2:26 p.m. the teacher passes out the bean bags to the students and says to the students, when I hand you the bean bag, hide it from me. Teacher says, "5, 4, 3, 2, 1 hide them." and the teacher says, "You can't put them in your clothing either."

At approximately 2:29 p.m. the students start tossing the bean bags up in the air and catching them.

Teacher says to toss the bean bag 10 times, and watch it with your eyes "that's called tracking" your vision is getting better so you should be able to catch these because your eyes are developing." Teacher asked the class if anyone tosses it more than 5 times, more than 8 times. One student says they caught the bean bag a million times.

Teacher takes a break to interject at 2:30 p.m. and tells the students to try and throw the bean bag in the air and while the bean bag is in the air to have the students clap their hands as many times as they can before the bean bag comes down and they catch it.

Teacher blows his whistle at 2:32 p.m. and asks the students how many times they were able to clap their hands before they caught the bean bag.

Teacher demonstrates the next skill, and tells/shows the students how to put a bean bag on their foot and kick it up in the air and then catch the bean bag. Teacher plays the song "Levitating" by KIDZ BOP Kids. Students do the activity/game with the bean bag until approximately 2:34 p.m.

The song ends and the teacher says, next week you're going to create your own bean bag throw activity/game. Teacher demonstrates a possible activity called shoulder, knees, and toes bean bag throw/toss and he throws bean bag in the air and touches his shoulder, knees, and toes while bean bag is in the air, and then the teacher catches the bean bag while it is coming down.

The teacher lets the students try the activity by throwing the bean bag in the air and touching their shoulder before the bean bag hits the ground and the student catches it.

Teacher walks around the gym/cafe and tells students that they can use both hands to catch the bean bag.

At approximately 2:39 p.m. the teacher stops the students from throwing the bean bag and says "I'm going to give you an extra credit activity." "You have to squeeze the bean bag between your feet and jump up, and try to throw the bean bag up in the air with your feet and then catch it." The students practice this activity until approximately 2:45 p.m. and the students are told to stop.

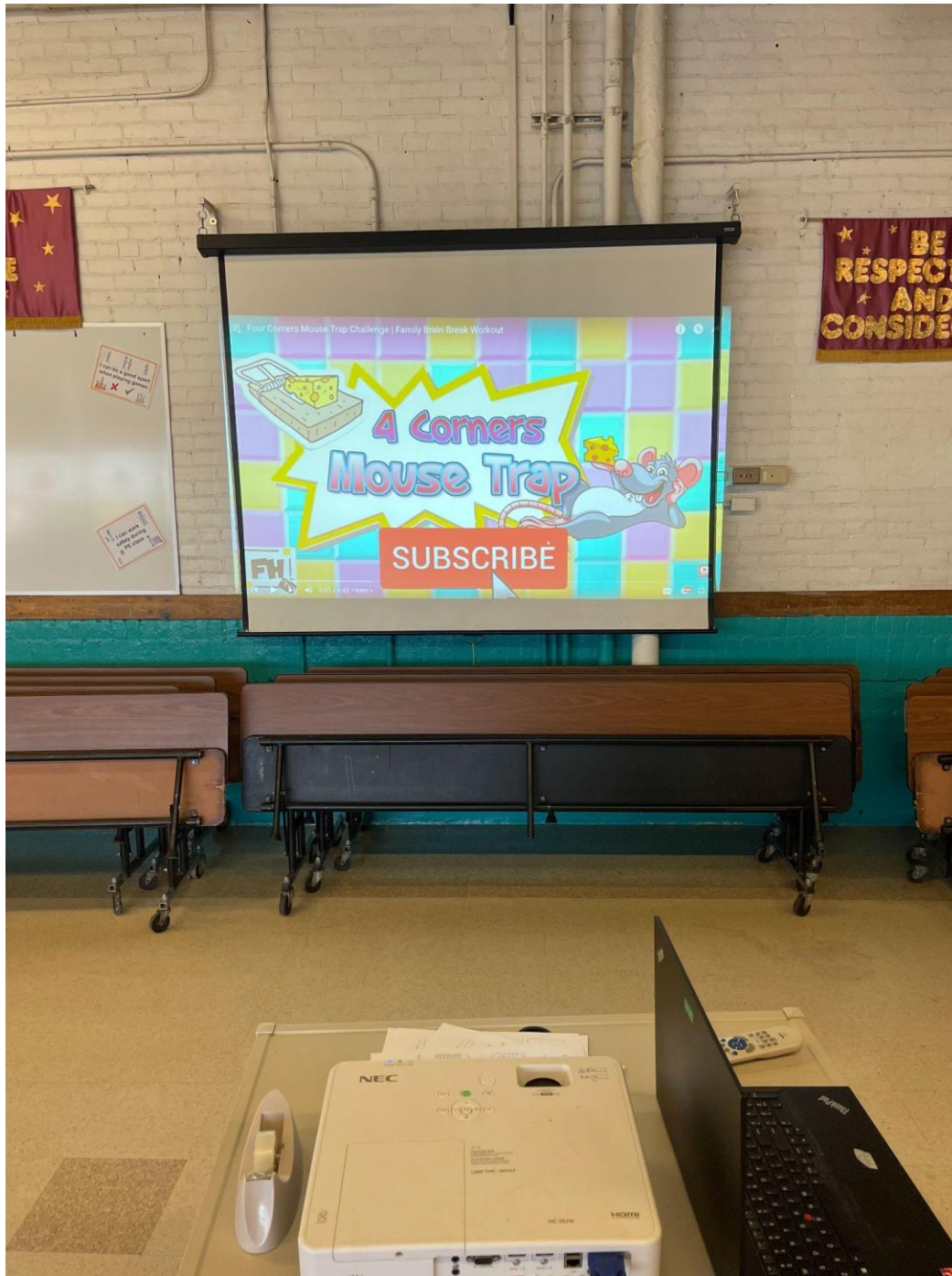
The teacher stands at the front of the class and says, "I'm going to show you how to do tracking." "This is where you throw the bean bag in one hand and catch it in your other hand." Teacher tells the students to stand on the dark gray square tile on the floor. Students are told to put the bean bag on the dark gray square tile that they are sitting on.

Teacher asks one of the students to walk around and pick up all of the bean bags. Teacher tells students to line up at the front of the gym/cafe and he asks them to rank themselves 1-5 on how effectively they think they can throw and catch the bean bag such as "Most of the time, some of the time, etc."

The students line up at the door where they came in to start the class. The students leave the cafe/gym at 2:49 p.m. with the gym teacher and they are escorted back to their classroom.



Image 1: Equipment/technology used in PE class for the game Four Corners Mouse Trap.



## Data Collector: Aaron Thompson

**Site: Middle School (6-8)**

**Location: Central New Hampshire**

**Teacher: Participant 5E**

**Date: Tuesday, October 18, 2022**

**Start: 11:00 a.m.**

**End: 12:10 p.m.**

**Background:** The location for this class takes place inside the gym since it is raining outside today. There are less than 20 students in the PE class and there's only 6th grade students in the class. The students started the class with a booklet activity. Next, the students did a warm-up which included jogging and stretching. Following the warm-up, the students in the class voted to play either a kickball or flag football tournament. There is one paraprofessional (assistant teacher) in the class. There is also one Plymouth State student-teacher in the class that is working to get his hours to become a certified PE teacher in the state of New Hampshire. The equipment used for the game Kickball included four hula hoops and one foam ball.

**Observation:** The Physical Education (PE) class starts at approximately 11:00 a.m. inside the gym. The PE teacher walks with the class from the hallway into the gym together as a group at the beginning of class. The students are told by the PE teacher to go to the locker room and to get ready for class. The PE teacher tells the students that even if they are not changing for class, they need to put their personal belongings, i.e., backpacks in the locker room.

At approximately 11:08 a.m. the students line up to turn in their booklet worksheets to the PE teacher. The PE teacher informs the researcher that this class only has 6th grade students in it. The booklets being completed by the students are for Physical Education: Fitness Testing and include their grade level, date, and a section where students self-assess their participation levels in class.

At approximately 11:10 a.m. all of the booklets have been collected by the PE teacher and the PE teacher begins taking attendance. The students sit on the gym floor in their assigned spots while the PE teacher takes attendance using his laptop computer. After taking attendance, the PE teacher tells the class to begin their warm-up by jogging around the gym (outside of the basketball court). The student jog around the outside of the basketball court lines for 45 seconds and then switch direction, and begin jogging counterclockwise around the gym. After the students switch directions, the PE teacher blows his whistle and reminds the students that they should be working on a consistent jogging speed and not sprinter at the beginning and having to stop to walk at the end. At the end of the warm-up jog, the paraprofessional exits the gym with a student. At approximately 11:23 a.m. the students stop jogging and begin stretching together as a class. The PE teacher stands in the middle of the gym and demonstrates the proper

stretching techniques to the students which are circled around him. During one of the stretches, the PE teacher reminds the students to reach with both hands to touch their feet.

At approximately 11:27 a.m. the students pair up with another student in the class and begin doing sit ups. One student stands on the other students feet or holds their feet with their hands, and the student sitting on the ground does his/her sit ups. After approximately 2 minutes the students switch and begin doing sit ups again for a couple of minutes. The PE teacher blows his whistle again and tells the students, “I know you can hear me blow the whistle, you need to stop talking.” All the students sit back down on the gym floor and the PE teacher instructs them to do push-ups, and the PE teacher demonstrates to the class how to perform a proper push up. The PE teacher stands in the middle of the basketball court and uses his cell phone to keep track of the time that the students are doing different exercises. The student-teacher in the class walks around to give some advice to a couple of the students in the class on how to improve their push-ups.

At approximately 11:32 a.m. the PE teacher blows his whistle and tells the students to line up on one of the corners of the gym if they want to play flag football, and if they don’t want to play that game, they can line up on the other side of the gym in the opposite corner if they want to play kickball. Two lines are formed by the students on opposite sides of the gym in the corners designed for each of the two sports/activities. The PE teacher then divides the groups into two additional lines based on gender, boys in one line, and girls in the other line for each sport/game. The student-teacher in the class walks around with a clipboard and writes down the students names and keeps track of how many students want to play each sport/game. After the number of students in each line are counted, the PE teacher determines that the class will begin the tournament for the sport/game Kickball. The PE teacher tells the students to regroup and sit together in the middle of the basketball court.

At approximately 11:35 a.m. the PE teacher stands in the middle of the basketball court with all the students sitting on the ground facing him, and the PE teacher begins to explain the rules and procedures on how to properly and safely play the game/sport Kickball. Some of the students in the class are talking while the PE teacher tries to explain the rules of Kickball. The PE teacher says, “One, two, three” and the students clap their hands one time to show that they are listening, and nobody is talking.

At approximately 11:40 a.m. the PE teacher finishes explaining the rules and expectations for the game Kickball. The PE teacher blows his whistle and starts to count off the students and assign them a number by stating, “one, two, three, one, two, three.” After all the students in the class have an assigned number. The PE teacher instructs them to meet in separate areas of the gym as a group to discuss and review the rules of Kickball, and the PE teacher tells them to discuss different strategies on how to play the game, such as how and when to steal a base, and when it is a good time to “bunt” the ball as a kicker. The students disperse to their assigned group spots/locations in the gym and begin talking together as a group. Some of the students even talk about who potential captains could be once they start playing the game.

The PE teacher and student-teacher walk around the gym, and they meet with each group to check in with them and to hear what they are talking about as a group for Kickball.

At approximately 11:48 a.m. the PE teacher tells the students to regroup in the middle of the basketball court in the center of the gym. The student-teacher begins setting out hula hoops around the gym floor as the PE teacher meets with the students to review the group conversations that took place. The PE teacher then states, "Let's try to get this going." The PE teacher tells which students are going to line up to kick the ball first, and he tells the students who's playing in the outfield. The PE teacher assigns the team names. One of the team names is North Carolina Blue and the other team is named Georgia Red by the PE teacher. After the PE teacher tells the students the positions they are playing and their team names, the students are told to line up for the game and they go to their designated positions and spots. The PE teacher then tells the students that are standing in line to be the kickers for the game that they need to stand in order by boy, girl, boy, girl, etc. Once the students are lined up by alternating gender, the PE teacher tells the line to back up all the way to the corner and states, "This is for safety." The PE teacher then walks further onto the basketball court and begins to assign students outfield positions and states, "Who's playing first base, second base, third base?" The PE teacher tells the students that if a student kicks the ball and it hits the bleachers it is a homerun. He further explains that they cannot catch a kicked ball off the wall for it to count as an out in the game. The hula hoops on the ground/gym floor are used as the bases. Students must stand inside of the hula hoops to stay "safe" during the game. The other piece of equipment being used for the Kickball game is one foam ball (color purple).

At approximately 11:56 a.m. the Kickball game begins. The first student kicks the ball into the air and a student in the outfield catches the ball indicating that the kick is out. The PE teacher blows his whistle and stops the game. The PE teacher tells the class that if there were to be a student on a base and this were to happen again, the runner on the base would have to stay where he/she is currently at and cannot advance to the next base, since the kicker on their team is out. The students resume playing the game until there have been three outs recorded and then the teams switch sides. Both teams have an opportunity to kick the ball and play in the outfield.

At approximately 12:06 p.m. the Kickball game ends and the PE teacher tells the students to line up behind their captains and they go down the line giving high fives to the players on the other team and the students tell each other "good game" as they leave the gym and go into the locker room to change for their next class. The students use the last 4 minutes of class to grab their personal belongings in the locker room and change back into their school clothes for their next class. The class ends at approximately 12:10 p.m. and the students leave the gym to go to their next class.



Image 1: Equipment used for the Kickball game.



## Data Collector: Aaron Thompson

**Site: High School (9-12)**

**Location: Central New Hampshire**

**Teacher: Participant 6F**

**Date: Wednesday, October 12, 2022**

**Start: 10:30 a.m.**

**End: 11:16 a.m.**

**Background:** The location for this class is in the gym. Two PE classes are sharing the gym at the beginning of the class period because of PSAT testing. The PE teacher being observed is having his students play activity/game frisbee.

**Observation:** The Physical Education (PE) class starts at approximately 10:30 a.m. Two Physical Education (PE) classes are sharing the gym at the start of the class period. One of the teachers has a class in the gym for Fitness Walking. The other Physical Education (PE) teacher that's being observed has his PE class in the gym. There are two PE teachers sharing the gym today because of PSAT testing and the school's schedule for today has changed. The students from both classes come into the gym and stand on assigned areas of the gym. The fitness walking teacher begins to take attendance simultaneously with the other PE teacher that's being observed. The PE teacher being observed takes attendance using his cell phone and makes his way around the gym to see each of his students in the class and speaks to each of them briefly.

At approximately 10:35 a.m. the PE teacher being observed finishes taking attendance. At the same time the Fitness Walking PE teacher takes her class out of the gym and tells the researcher that they are going outside to walk for 30 minutes.

There are less than 15 students remaining in the class. The students remaining in the gym gather around the PE teacher and sit in a semi-circle facing the teacher. The teacher tells them that they are playing frisbee today, and they are using different types of frisbees. The PE teacher tells the students they can use a bigger frisbee with a soft rim which is easier to catch. The PE teacher says they will start the class by practicing throwing and catching. The teacher explains to the students the different types of frisbee throws and how to perform the frisbee throw, "backhand - step towards your partner" and the PE teacher also tells the students to work on throwing it flat which will help with accuracy.

Teacher tells the students to pair up with another student in the class and to stand approximately 15 feet apart. The PE teacher tells the students that if they don't want to pair up with a partner, they can practice throwing the frisbee at the wall or designated spots on the gym floor where there is an arrow. The PE teacher also tells the students that if they don't want to participate in throwing the frisbee for practice, they can walk around the gym.

At approximately 10:44 a.m. the PE teacher tells the students to go get a frisbee and start practicing with a partner, throwing the frisbee back and forth. The PE teacher moves around the gym and works with students as they are practicing throwing the frisbee and giving advice and pointers to improve their throwing accuracy. He tells one student, "Make sure your pointer finger is pointing towards your partner as you are throwing it, and your thumb is on top of the frisbee." After the PE teacher makes this statement to the students, he comes over to the researcher and says the student in the white shirt has autism and is doing really well today in class. One of the frisbees being used is called InReach by Gopher which is specifically designed and made for Adapted PE (see image below). The other frisbee being used is Aerobie by SuperDisc. The PE teacher tells one student, "That was a good one."

At approximately 10:54 a.m. the PE teacher tells the students to take three big steps backwards, and to start practicing throwing the frisbee at a further distance away from their partner.

At approximately 10:59 a.m. the PE teacher blows his whistle and tells the students to "come here really quick." The PE teacher says, "We are going to try/start throwing and catch the frisbee while moving." The PE teacher tells the students they are going to start on the outside of the basketball court, and out of bounds line at the center line where he set up a cone. The PE teacher tells the students there's going to be two lines going for this activity/drill. One line passes it to the person standing at the front of the other line and then starts to walk towards the other side of the gym. The student that caught the frisbee then throws it to the person that threw it to them, and then the line rotates to the next person in line. The PE teacher tells the students that this activity is somewhat of a leapfrog drill. The PE teacher tells the students that this is a good activity to improve throwing and catching skills that will be used later when they start playing the game Ultimate Frisbee, which he states, "Is a lot of fun." After a few minutes of practicing this drill the PE teacher says, "Everyone go through the line one more time and we will be done with this activity."

At approximately 11:06 a.m. the teacher tells the students to stop and to come over to where he is at. The PE teacher tells the students they are going to practice the forehand throw next which is a little more difficult. The PE teacher tells the students their thumb is going to go on the outside rim, and their middle finger is going in the middle and the pointer finger is going on the side to help with support. The PE teacher demonstrates how to perform the forehand throw. The PE teacher then tells the students to tuck their elbow when they throw the frisbee, and to pair back up with their partner to practice throwing the frisbee back and forth using the forehand technique. The students practice throwing the frisbee with their partners for a few minutes.

At approximately 11:13 a.m. the PE teacher tells the students to stop practicing and to go towards the corner of the gym to practice long throws. The PE teacher tells the students that when they are playing the game Ultimate Frisbee that once they catch the frisbee they can only take two steps before they have to pass it to their teammate. The PE teacher makes two lines in the corner of the gym. One of the lines is for throwers and the other line is for students that are going to catch the frisbee. The student in the front

of one line holds the frisbee as the student in the other line starts running towards the other side of the gym and then throws it to them when the student reaches the half court line.

At approximately 11:15 a.m. the other PE teacher with the Fitness Walking class enters the gym. The PE teacher being observed ends the passing and throwing drill with his students.

At approximately 11:16 a.m. the PE class ends.



Image 1: Equipment used for the Frisbee game, activity and drills.



## Data Collector: Aaron Thompson

**Site: Elementary School (K-5)**

**Location: Central New Hampshire**

**Teacher: Participant 7G**

**Date: Wednesday, October 19, 2022**

**Start: 8:09 a.m.**

**End: 9:00 a.m.**

**Background:** The location for this class is in the gym. There are less than 15 students in the class. The students in PE class today begin with walking/jogging and stretching. The students also participated in a scooter activity and jump rope game.

**Observation:** The Physical Education (PE) class starts at approximately 8:09 a.m. The teacher plays music, the song, "Shooting Stars" by Bag Raiders as the students enter the gym. The teacher sets out 4 yellow cones on each of the corners of the basketball court. The students begin walking around the outside of the basketball court. There are two students that enter the gym with an adult/paraprofessional. The teacher walks with the class around the outside of the basketball court. One of the paraprofessionals walks with the students around the basketball court, the other paraprofessional stands inside of the basketball court and watches the students in the class walking. After the song ends, the teacher says, "I need all the students to come inside of the basketball court and we are going to stretch."

At approximately 8:16 a.m. the teacher turns on the projection screen that displays the stretches that the students are going to perform. The students begin stretching and the PE teacher stretches with the students. The two paraprofessionals stand behind the students stretching and watch the students stretch. The PE teacher tells the students, "Good job." The projection screen shows and rotates through different stretches with a countdown timer set for 15 seconds for each stretch. One of the paraprofessionals begins stretching with the student after the 5th or 6th stretch. There's approximately 20-25 stretches and poses that the students perform after walking their laps around the basketball court. At the end of the stretching routine the PE teacher says, "Great job."

At approximately 8:20 a.m. the PE teacher says, "Can I please have all of the friends sit at the center of the gym, inside of the circle." One of the paraprofessionals sits with the students in the circle, and the other paraprofessional walks with one of the students around the outside of the basketball court. The PE teacher has the students go around in the circle and say their names. After the students introduce themselves, the PE teacher says, "We are going to use a hula hoop and a scooter for today's activities." The PE teacher asks the students what they notice about the hula hoop and the scooter. The students say, "They are both yellow." The PE teacher uses three of the students as a demonstration to show the students in the class what they are doing today and how to properly use the equipment. The PE teacher

says, “We are going to listen to music, and when the music stops, we are going to rotate students in each of the groups.”

At approximately 8:24 a.m. the PE teacher organizes three students in each of the groups. One of the students sits on the scooter, and the other two students in the group hold the hula hoop to help steer the student on the scooter around the gym. There are four groups with three students in each group. The PE teacher begins playing music, and the two paraprofessionals join a separate group to help the students navigate around the gym and do the activity. At the end of the first song, the PE teacher tells the students to rotate and change who is on the scooter and who is holding the hula hoop. The PE teacher walks around the gym and checks in with each of the four groups and provides advice, tips and suggestions to the students. At the end of the second song, the PE teacher says, “We’re going to do our last switch” and has the student rotate between holding the hula hoop and the student riding the scooter. The PE teacher begins playing the song, “Best Day of My Life” by American Authors and the students begin the activity. At the end of the third song the PE teacher says, “Friends, can you please put the hula hoops and scooters on top of the stage, and then come join me back at the circle in the middle of the gym.”

At approximately 8:31 a.m. the students join the PE teacher at the middle of the gym and sit around the center circle. The PE teacher says, “Raise your hand if you think you met new people today.” Followed by, “That is one of our goals today. Our other goal is to learn and follow the routines for class.” The PE teacher then sets up a jump rope on the ground and asks two students to hold the jump rope, one student at each end. The PE teacher demonstrates how to jump over the jump rope as the students wiggle the jump rope as a “snake” which means the jump rope does not leave the ground. The PE teacher has the students line up single file and the PE teacher starts playing the song “Be OK” by Ingrid Michaelson. The students one at a time begin jumping over the jump rope “snake” on the ground. At the end of the song, the PE teacher tells the students to lift the jump rope up off of the ground slightly, about 1-inch off of the ground. The PE teacher shows the students how to step over the jump rope properly. As the students jump/walk over the jump rope one at a time, the other students in the class clap and cheer for the students stepping over the jump rope. The PE teacher says, “Good job” followed by instructions to the students holding the jump rope by telling them not to lift the jump rope too high.

At approximately 8:37 a.m. the PE teacher tells the students to stop and line backup single file in the line. The PE teacher tells the students that for the next activity, the students are going to walk under the jump rope. The PE teacher has two students in the front of the line demonstrate how to go under the jump rope properly. The PE teacher says, “Great job.”

At approximately 8:38 a.m. the PE teacher begins playing music and the students one at a time go under the jump rope trying not to touch it. One of the paraprofessionals helps a student hold the jump rope. The students in the class that are standing in line waiting for their turn clap and cheer for the student that is going under the jump rope. At the end of the song, the PE teacher tells the students to sit back in the middle of the basketball court around the center circle. The PE teacher asks the students to raise their

hands if they had fun today, and if they met someone new today. Lastly, the PE teacher tells the students to raise their hand if you're going to come back next week. The PE teacher asks the student ambassadors to help some of the students get to their next class.

At approximately 9:41 a.m. the class ends and the students exit the gym with the two paraprofessionals and the student ambassadors that are helping out in the PE class. The PE teacher tells some of the students, "See you at lunch" and "Thank you guys."



Image 1: Equipment used for the warm-up walking/jogging activity.

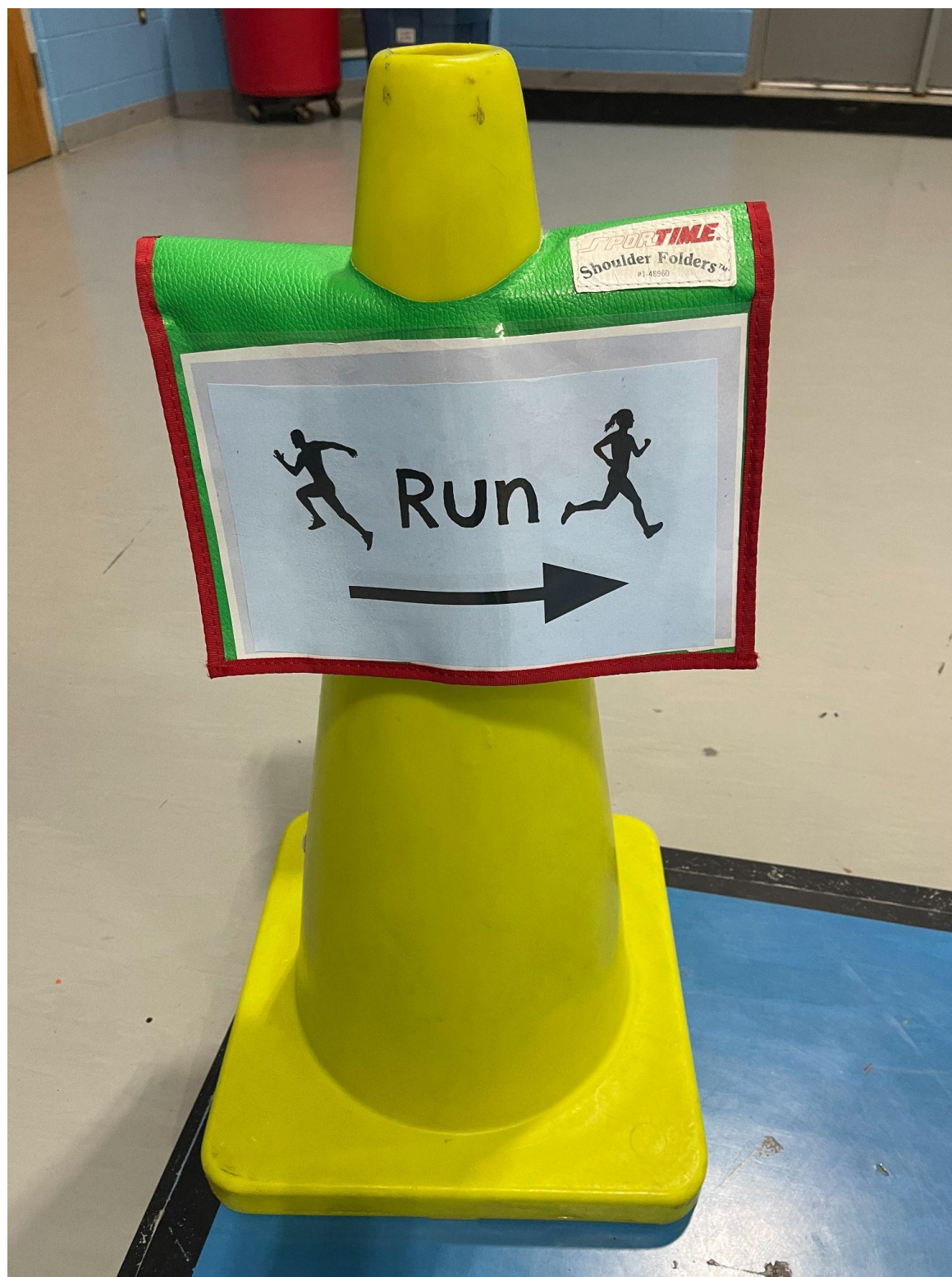




Image 2: Equipment used for the scooter activity and jump rope game.



## Data Collector: Aaron Thompson

**Site: Middle School (6-8)**

**Location: Central New Hampshire**

**Teacher: Participant 8H**

**Date: Wednesday, October 19, 2022**

**Start: 10:15 a.m.**

**End: 11:15 a.m.**

**Background:** The location for this class is in the gym. There are less than 15 students in the class. The students begin class with a warm-up and stretches. The first activity being played is “Brick Guard” and the second activity is the Pacing Test. The class concludes with the students playing the game “KingPin.”

**Observation:** The Physical Education (PE) class starts at approximately 10:15 a.m. The PE teacher plays the song “Tiny Dancer” by Elton John as the students enter the gym. The PE teacher reminds the students to grab their pedometer and put it on. The PE teacher uses a projection screen to display activities for the student to use for their warmup and stretches. Some of the warm-up activities include Pacer Widths (Jogging), Jumping Jacks, Leg Drops, Give Fist Bumps to as Many People as you can, Pacer Widths (Skipping), Side Lunge Stretch (right and left side), Waist Twists, and Mountain Climbers.

At approximately 10:25 a.m. the students end their warm-up and stretches. The PE teacher uses a microphone and tells the students to sit down. The PE teacher explains the rules for the game “Brick Guard.” The PE teacher tells the students that the out of bounds lines are the outside of the basketball court. The PE teacher tells the students that they will be partnered up and one partner has a noodle that can be used for defending. Their partner is going to try and knock over another student's team's foam brick. The PE teacher tells the class that if they are tagged with a noodle by someone on the other team, they have to go back to their foam brick and do 10 jumping jacks. Also, if they get their brick knocked over, they have to do 10 jumping jacks. The PE teacher tells the students that they can set up their brick anywhere they would like within the lines of the basketball court. The PE teacher tells the class to be kind and courteous by not hitting them as hard as they can with the foam noodle. There are seven teams with two students on each team. At approximately 10:28 a.m. the game begins by the PE teacher playing the song “Livin’ for the Weekend” by Fitz & The Tantrums.

At approximately 10:35 a.m. the game ends and the PE teacher tells the students to put away their foam noodles and foam bricks. The PE teacher tells the students to sit back down on the gym floor. The PE teacher tells the students that if they get too tired to run, that they need to walk as an active break instead of sitting or laying down on the gym floor. At approximately 10:38 a.m. the students begin the next game/activity. The PE teacher plays the song “I’m so Excited” by Pointer Sisters to begin the new game.

The PE teacher tells the researcher that the class is doing their Fitness Testing this week, and earlier this week the students did the sit and reach test, and sit-ups and push-ups portion. Today the students are doing the “Pacer Test” for their Fitness Testing. The PE teacher uses the projection screen to play audio over the speaker system that explains how the Pacer Test will happen and the directions.

At approximately 10:42 a.m. the students begin the Pacer Testing. There is a beeping noise that signals to the students that they can begin running to the other side of the gym. The projection screen shows, “Pacer Music Version” - Cooper Institution, Physical Best Fitnessgram. The students continue running from one side of the gym to the other side each time the beeping noise starts. After a couple of minutes, the audio being played over the speaker system says, “End of Level 2.” There are a couple of students that have decided not to continue with the Pacer Fitness test, and are now sitting on the ground near the gym’s stage. The Pacer Testing continues for another couple of minutes, and the audio signals, “End of Level 3.” The audio then states the number 25, which indicates that the students have run to the other side of the gym and back a total of 25 times. A couple of minutes later the audio on the speaker says, “End of Level 4.” At this point there are approximately half of the students continuing to run and the other half have stopped to end their testing and are sitting on the gym floor near the bleachers and the stage. The audio then says, “End of Level 5.” There are now only 5 students remaining as the audio signals, “45.” After a couple of minutes, the audio speaker says, “55” as the beeping continues at a quicker rate, followed by “65” and then “70.” The audio speakers then signal, “End of Level 8.” There is only one female student remaining. A couple of the students in the class begin to cheer on the last remaining student. The PE teacher tells the student they had two misses and that the Pacing Test is now over. The PE teacher tells the student, “Good job.”

At approximately 10:52 a.m. the PE teacher tells the students, “Please make sure you tell me your score.” The students line up and tell the PE teacher their scores. The PE teacher also tells the students, “Please put on your respective jersey for the next game.” After the students have put on their jerseys, the PE teacher tells the students to have a seat in the middle of the gym. The PE teacher uses the microphone and speakers to tell the students to “sit up” and “submit your scores if you haven’t done so already.”

At approximately 10:56 a.m. the PE teacher informs the class that the last game they are going to play today is called Kingpin. The PE teacher tells the class that for the last game, the objective of the game is to knock down all of your opponents bowling cones.

Each person is allowed to have only one ball in their possession. You can only pick up a ball on your own home side of the court. The PE teacher asks the class, “Who’s side can you pick up a ball from?” The students respond, “Only our side.” The PE teacher tells the class that if they can shoot the foam ball into the basketball hoop that is considered a “jailbreak” and all of the players on their team come back into the game. The PE teacher tells the class that if they catch a ball, they can hand it to another student in the class to shoot the ball. The PE teacher tells the class that if someone can dunk the ball that they will



win the game. After the PE teacher finishes explaining the rules, the students stand up and come to the front of the gym to grab a foam ball out of the storage cage.

At approximately 11:01 a.m. the game “KingPin” begins. The PE teacher tells the students that once the song starts playing that it will begin the game, and he states, “Game on.” Once the game has started, the PE teacher uses the projection screen to start a countdown timer that is set at 13 minutes. The PE teacher uses the microphone and speaker to state, “Please do not kick the balls.” After the conclusion of three songs, the PE teacher states, “JailBreak” meaning that all of the students are back in the game that have been knocked out. After a couple of minutes, the PE teacher says, “It looks like we have a winner.” The PE teacher then states, “Once the bowling pins have been set back up, we can begin the next game.” The students set everything up for the next game, and the PE teacher starts the next game by playing another song “Love Shack” by the B-52’s, and he resets the timing on the projection screen to 7 minutes. At approximately 11:12 a.m. the PE teacher tells the class that they have approximately 2 minutes remaining and that they need to work on getting their steps up for today. The next song “Girls Like You” by Maroon 5 begins playing. Just before the timer runs out the PE teacher tells the class that the Red team has won the game. At the conclusion of the game, the PE teacher tells the students to put up their jerseys and put the foam balls back into the metal storage cage at the front of the gym. The students also check in with the PE teacher and turn in their pedometers.

The class ends at approximately 11:14 a.m. and the students in the class exit the gym as the next group of students in the next class come into the gym.

Photo 1: Equipment used for the “Brick Guard” game.

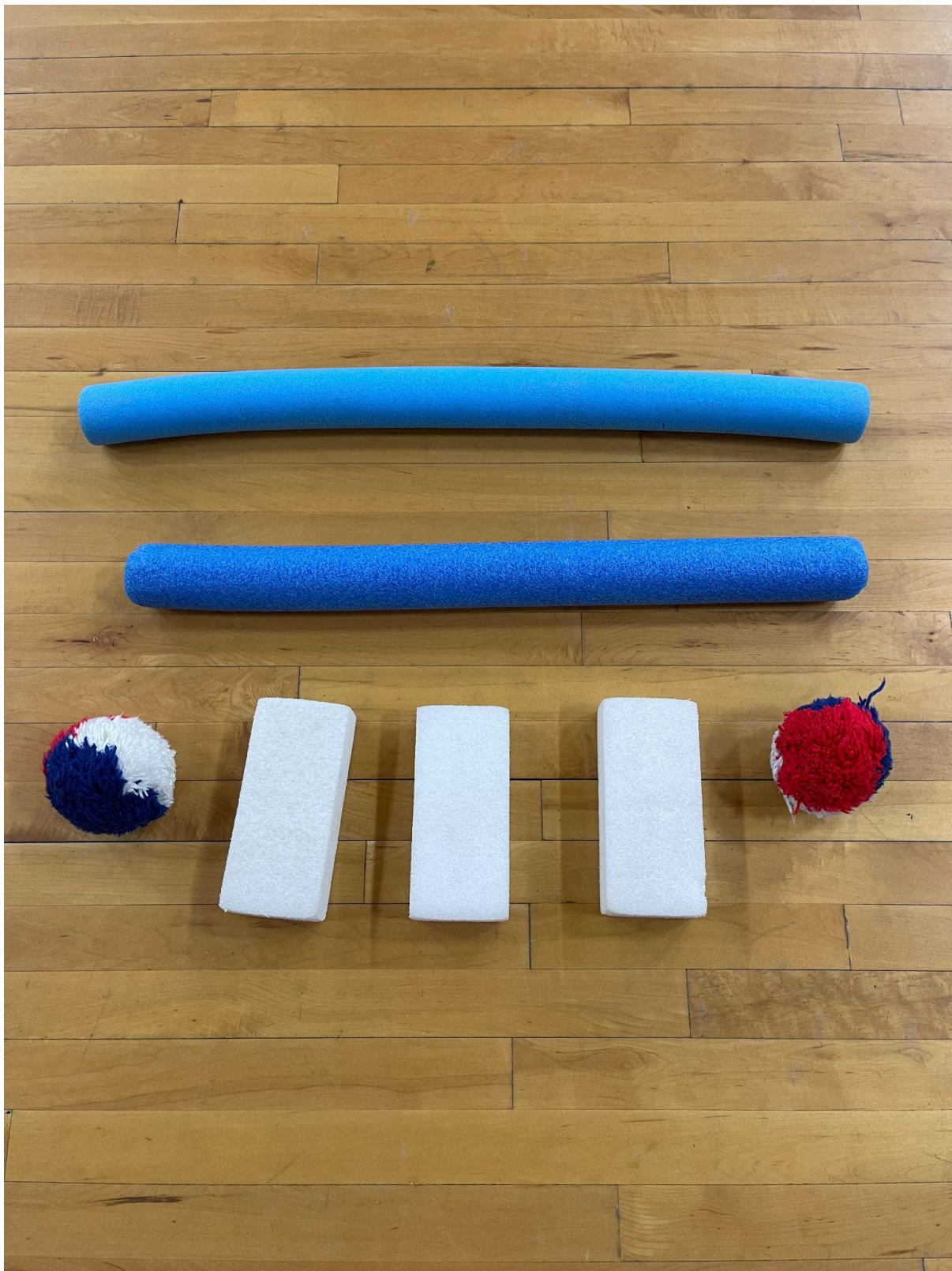




Photo 2: Equipment used to track steps and participation during the PE class.





Photo 3: Equipment used to upload the data collected after students participated in PE class.



## Data Collector: Aaron Thompson

**Site: Middle School (6-8)**

**Location: Central New Hampshire**

**Teacher: Participant 9I**

**Date: Thursday, October 20, 2022**

**Start: 9:00 a.m.**

**End: 9:45 a.m.**

Background: The location for this class is in the gym. There are approximately 20 students in the class. The students begin class with “open gym” and shoot basketballs on their own with the help of a student helper. The first activity being played is a parachute activity and the second activity uses the parachute and is called Sharks and Minnows. The class concludes with the students playing a game with the parachute where they have the opportunity to identify different colors on the parachute and run to the other side underneath the parachute.

Observation: The Physical Education (PE) class starts at approximately 9:00 a.m. The PE teacher stands in the hallways and greets the students as they enter the gym. Once all of the students have entered the gym, the PE Teacher says, “Open gym for the first 10 to 15 minutes today.” Nearly all of the students go to the back corner storage closet and grab a basketball. There is one paraprofessional in the class. The paraprofessional sits on the bench and watches the students shoot the basketballs. There are six basketball goals in the gym, and the students decide on their own which basketball hoop to shoot on. The PE teacher tells the researcher that half of the students in this PE class have an IEP and the other half of the students are student helpers that are assigned one-on-one with a student in the class that has a disability. The PE teacher takes attendance as the students shoot basketballs on their own with their assigned student helper partner. The PE teacher tells the researcher that the name of this class is called Unified Sports.

At approximately 9:13 a.m. another paraprofessional enters the gym with a student that’s in a wheelchair. The PE teacher walks around the gym and meets with some of the students that are shooting the basketball and offers them advice and coaching on how to properly shoot the basketball. The PE teacher tells one student, “Try to use both of your hands to shoot the basketball.” The PE teacher then says, “A couple more minutes, and then we are going to switch.”

The PE teacher tells the researcher that last week one of the students in the class ran out of the gym, and the paraprofessional that was assigned to that student didn’t even notice because they weren’t engaged in the class and not an active participant in helping out their assigned student.

At approximately 9:20 a.m. the PE teacher goes to the back storage closet and grabs a large black bag. The PE teacher blows his whistle and says, “Awesome memory. Good job holding the basketballs when I blow the whistle” followed by, “Everyone come have a seat in the middle of the gym.” The students put

their basketballs away in the back storage closet where a big metal storage box is located. The students meet in the center/middle of the gym. The PE teacher says, “We are going to do a fun activity today.” “Raise your hand if this is your first time playing with a parachute.” Two of the students in the class raise their hands. The PE teacher says, “With your partner, we are going to spread out and open up the parachute.” The students begin unpacking the parachute from the big black bag, and evenly spreading it across the middle of the basketball court. Once the parachute is fully opened, the students start moving their arms up and down making the parachute bounce in the middle and across to the other side like a wave in the ocean. The PE teacher says, “Let’s have everyone grab a handle and shake the parachute up.” The PE teacher says, “Alright now, lift way up high, pull it down, lift, use those muscles, lift, pull it down, use those muscles.” Followed by “shake it out a little bit.” “What we are going to do next, I’m going to call a color, when I call the color green, you are going to let go of the parachute, and walk under the parachute to the other side.” The PE teacher calls out different colors and the students take turns going under the parachute to the other side while the other students in the class hold up the parachute above their heads. One of the paraprofessionals participates in the parachute activity with the students, and the other paraprofessional continues to sit on the bench and is on his cell phone. The PE teacher says, “Alright, we’re going to get tricky now. I’m going to call two colors now. Make sure we are being safe as we go under the parachute.” The PE teacher tells the students to lift the parachute up above their heads and he calls out two colors. The students that are holding handles at those two different colors go under the parachute and run underneath to the other side.

At approximately 9:31 a.m. the PE teacher tells the students to sit down on the ground and hold the parachute. The PE teacher says, “The next game we are going to play is called Sharks and Minnows.” The PE teacher reminds the students before the beginning of the game, “We are not pulling off our shoes.” The PE teacher also reiterates to the students in the class that they need to be safe. The PE teacher picks two of the students in the class to be the sharks during the first game of Sharks and Minnows. The PE teacher also says, “One last thing before we play, you have to hold the parachute tight.” The students begin playing the game, and the PE teacher says, “Once you go under the parachute, you are a shark.” Once the two students make it to the other side of the parachute, the PE teacher selects two new students to be the sharks and has them crawl under the parachute to the other side while the Minnows hold the parachute up slightly off of the ground. The PE teacher begins the next round of the game by saying, “One, two, three, let’s go.”

At approximately 9:38 a.m. the PE teacher ends the game Sharks and Minnows and lets half of the students in the class go under the parachute together. The PE teacher tells the student helpers in the class, “One little reminder, if you’re still on the other side, make sure you are holding the parachute tight.” After a few minutes, the PE teacher blows his whistle and says, “Everybody up and out of the parachute.” All of the students under the parachute exit from underneath and grab a handle on the outside of the parachute. The students sit on the ground holding the parachute. The student in the wheelchair along

with the paraprofessional that is working with them exit the gym. The other paraprofessional is still sitting in the same spot on the bench that they have been sitting at for the entire class period. The PE teacher blows his whistle and says, "Let's get it folded up." The students work together to fold the parachute back up and put it into the big black storage bag. Once the parachute is put away, the PE teacher has the students circle up in the middle of the basketball court, and everyone puts their hands into the circle. The PE teacher says, "One, two, three, team."

The students walk to the bleachers and grab their backpacks and then exit the gym. At approximately 9:45 a.m. the Unified Sports PE class ends.



Photo 1: Parachute used for Unified Sports PE class.





## Data Collector: Aaron Thompson

**Site: Middle/High School (6-12)**

**Location: Central New Hampshire**

**Teacher: Participant 10J**

**Date: Tuesday, November 8, 2022**

**Start: 10:00 a.m.**

**End: 11:15 a.m.**

**Background:** The location for this class is outside on the soccer field. There are less than 10 students in the class. The students begin class with a jog/walk warm-up, stretches, and drills. The students in this PE class played a game called Bocce.

**Observation:** The Physical Education (PE) class starts at approximately 10:00 a.m. The students meet in the gym for attendance. There are less than 10 students in the class this period, and there is one paraprofessional/educational assistant in the class. After taking attendance, the PE teacher tells the class that they are going to go outside today to the soccer field to play the game Bocce. The PE teacher also explains to the class that they must go outside today because the gym is being set up for a theatrical school play by the drama class. The students walk outside to the soccer fields, and the PE teacher instructs them to run and walk two laps around the soccer field to warm-up. The PE teacher says, "Take two laps around the soccer field." The students in the class warm-up via walking and jogging around the soccer field. The PE teacher says, "One to go" as students begin to complete their first lap around the soccer field. As the students finish their second loop around the soccer field, the PE teacher begins to set up the equipment that will be used to play the game Bocce. As the students finish their second loop around the soccer field, the PE teacher says, "Stop over here."

At approximately 10:13 a.m. all of the students finish their second loop around the soccer field for their warm-up and meet as a group with the PE teacher near the bleachers. The paraprofessional tells one of the students in the class, "You're the fastest one out here today." The PE teacher explains to the students in the class that they are going to do a series of drills before they begin playing the game Bocce. The PE teacher says, "High knees" for the first running drill, followed by "Lunges" and then "Straight Leg" walks. The paraprofessional tells one of the students in the class, "Set a good example" and "Good job." The students continue the drills and perform the following activities: Straight leg kicks, High knee skips, Karaoke, 5 push-ups, 10 squats, Planks for 30 seconds, and then finishing with strides. The PE teacher says, "Use your opposite arm and leg" for high knee skips. At the end, the PE teacher has the students in the class sprint to the other side of the soccer field and back. As the students are finishing their sprints to the other side and back, the PE teacher says, "Are you toasty now?" Students are told by the PE teacher to do it again a second time, and they take off down the soccer field to the other side and then back again.

to where they originally started. Once the students have finished their second sprint across the soccer field and back, the PE teacher says, “Turn and burn.” The students in the class take off a third time, sprinting down the soccer field to the other side and back again. As the students finish their third and final sprint, the PE teacher says, “Good job” and claps her hands as students finish.

At approximately 10:22 a.m. all the students in the PE class gather around the PE teacher and she begins to explain the rules for the game Bocce. The PE teacher says, “You have to work together as a team to score.” The PE teacher divides the students into teams and assigns them different colored balls. The Blue team will play against the green team, and the Red Team will play against the orange team. After the teams have been selected by the PE teacher, they begin playing the first game and the paraprofessional says, “Let’s go.” There are two games being played simultaneously by the four teams on the soccer field. Each team has been assigned different colored balls, and they roll and throw them in a similar fashion to bowling. The players, i.e., the students in the class, try to knock the other team's ball(s) out of the circle. The game is like the sport of curling. The PE teacher and the paraprofessional in the class walk back and forth between both games and offer students advice and suggestions on their form, technique, and possible game strategies to use. The PE teacher says, “Alright, I like that roll.” The paraprofessional says, “Come on team.” After a couple of minutes, the PE teacher says, “The score is 3 to 2.” The games continue and the PE teacher exclaims, “Wow! Okay!” as one of the students successfully knocks another player's ball out of the circle. The first game ends, and the PE teacher says, “Alright, line it up again.” Indicating it is time to start the next round. The paraprofessional claps his hands as the students begin playing the second game. The paraprofessional says, “Another good one.” The PE teacher tells one student, “Alright, good job.”

At approximately 10:38 a.m. the second game of Bocce ends, and the students in the PE class set everything up for the third game. The paraprofessional says, “Don’t forget to grab that green ball.” The students begin playing the third game, and after a couple of minutes, the PE teacher says, “Hop, skip, jump” as one of the students in the class throws the ball down towards the circle. The paraprofessional says, “That’s what I’m talking about” as the next student in line throws their ball. The PE teacher says, “The score is 9 to 9, tie game.” The PE teacher and the paraprofessional walk around as the third game is being played, and they give students high fives. As the third and final game is ending, the PE teacher says, “Alright, you can put your Bocce balls back into the bag.”

At approximately 11:10 a.m. all the Bocce balls and equipment have been picked up and put away from the game. The students leave the soccer field and head back to the gym. Once the students are back in the gym, they get their personal belongings from the locker room and line up at the door to exit the gym. The bell rings at 11:15 a.m. and the students leave the gym to go to their next class.



Photo 1: Equipment used to play the game Bocce.





Photo 2: The PE teacher had to take the class outside due to the gym being set up for a play.



## Data Collector: Aaron Thompson

**Site: Elementary School (K-4)**

**Location: East New Hampshire**

**Teacher: Participant 11K**

**Date: Wednesday, November 2, 2022**

**Start: 1:45 p.m.**

**End: 2:30 p.m.**

**Background:** The location for this class is outside on the playground. There are less than 20 students present in this PE class. The students in PE class today begin with a short meeting in the cafe/gym, and then go outside to participate in the PE class. The students participated in a game called Ghosts in the Graveyard.

**Observation:** The Physical Education (PE) class starts at approximately 1:45 p.m. The PE teacher walks out of the gym and across the hallway to the library where the students are waiting. The students enter the gym from across the hallway, students are coming to PE from the library. The PE teacher tells the students to use some hand sanitizer as they enter the gym and begins reviewing the A.B.C.D. rules of PE and the PE Checklist with the students which are posted on the wall inside the gym (see images below). The students put their water bottles on the stage and walk back to the hand sanitizer station on the wall near the entrance of the gym to put hand sanitizer on their hands.

The PE teacher then tells the students, "Sit on the black line." After the PE teacher takes attendance, she says, "Stand up and leave your water bottle on the ground." The PE teacher then proceeds to tell the class, "Because it is a beautiful day outside today, we're going outside for PE today."

At approximately 1:50 p.m. the class walks outside with the PE teacher to the playground. The PE teacher helps one of the students tie his shoes before beginning the first activity/game. After she is done helping the student tie his shoes, the PE teacher says, "Stand up where you are." The students stand inside of four squares that are painted on the ground. The PE teacher says, "Touch the yellow slide, touch the blue monkey bars, and then touch the white bench." The students in the class leave their designated spots and run out onto the playground to touch the three pieces of equipment. Once the students return to their original spots, the PE teacher says, "Have a seat over here." The students move to a different square that's painted on the ground. The PE teacher says, "Go touch the two trees." The students stand up and go onto the back side of the playground to touch both trees. When the students come back to their original spots, the PE teacher says, "I need to have your whole body listening."

At approximately 2:00 p.m. the PE teacher explains the next game, which is called Ghosts in the Graveyard. The PE teacher tells three of the students in the class that they will start the first game as the "ghosts." The PE teacher instructs the three ghosts to face the wall and count to thirty. The PE teacher

says, "Once you count to 30, call out Ghost in the Graveyard" to let the other students in the class know that you are about to go find them. The students in the class that are "hiding in the graveyard" are hoping the "ghost" doesn't find them or they can outrun them before getting tagged. The PE teacher reminds the class of this, and says, "When you're tagged, where do you go?" The PE teacher also reminds the students, "You can hide with a friend." As the students begin to get tagged by the ghost and walk back to their starting spot, there is a paraprofessional in the class that is joining the class with one student. At the end of the first game, the PE teacher says, "Look and see who your ghosts are." There are three new "ghosts" that count to 30 and then begin looking for the other students in the class that are hiding. The paraprofessional interacts with the students in the second game after they have been tagged and are walking back to their starting spot by tap dancing with them. At the end of the second game, the PE teacher asks, "Do you need to rest?" The students in the PE class are ready to start the next round of the game and don't take a break. The PE teacher reminds one of the students in the class, "Let's get that shoe tied." The PE teacher also tells the class, "If you're getting tired, find a place that's closer to go hide." At approximately 2:15 p.m. the PE students finish the next round of the game and have a seat on their assigned squares where they started the class outside. The PE teacher says, "Second graders, if you can hear me, put your hands on your knees, touch your nose." The students follow the teacher's instructions. The PE teacher says, "Good job" and goes around to each of the students in the PE class and gives them a high five.

At approximately 2:20 p.m. the PE teacher tells the students that the last 10 minutes of class they can have free time. The PE teacher brought out some chalk and some students drew on the playground sidewalk. The PE teacher also brought out a bag of assorted balls, and some of the students paired up with a friend and played with each other, throwing, and kicking the ball to their partner. The PE teacher says, "If you're going to kick the ball, use this ball."

At approximately 2:29 p.m. the PE teacher says, "One more minute." The students at the end of the class period line up, and the PE teacher says, "Get your water bottle after you put away the balls." The PE teacher tells one of the students, "Can you take responsibility for that blue bag?" One of the students in the PE class carries the bag of balls into the building. At approximately 2:30 p.m. the PE class ends.



Photo 1: Physical Education (PE) Checklist and A.B.C.D. Rules posted inside the gym by the PE teacher.



Photo 2: Equipment used by the PE teacher during class.





## Data Collector: Aaron Thompson

**Site: Middle/High School (6-12)**

**Location: Central New Hampshire**

**Teacher: Participant 12L**

**Date: Tuesday, November 15, 2022**

**Start: 8:55 a.m.**

**End: 9:50 a.m.**

**Background:** The location for this class is in the gym. There are less than 25 students in the class. The students begin class with a warm-up that includes running/jogging and push-ups, sit-ups, and planks. The first Basketball activity being played is called King of the Key. The class concludes with the students playing the game Knockout.

**Observation:** The Physical Education (PE) class starts at approximately 8:55 a.m.

The students enter the gym, some of the students go to the locker room to drop off their belongings and some of the other students come sit on the gym floor at the center of the basketball court. The PE teacher takes attendance as the students come out of the locker room and have a seat on the gym floor. The PE teacher says, "Come on, hurry up." The PE teacher tells the researcher that this is a High School class, grades 9-12. The PE teacher says, "We are going to have plenty of time to play." The PE teacher says, "Let's do it."

At approximately 9:03 a.m. the students begin their warm-up by walking around the outside of the basketball court. The PE teacher uses the scoreboard clock to keep track of the time students have walked around the gym. The PE teacher asks one of the students in the class, "Did you have a good weekend?"

At approximately 9:06 a.m. the PE teacher tells the students to stop walking for their warm-up and to go grab a quick drink of water. Some of the students stand around waiting for the next activity, and some of the students go to the water fountain to get a drink of water. At the end of the water break, the PE teacher says, "Everybody get a partner." The PE teacher tells the students that they are going to jog to the other side of the basketball court and then once they get back to the other side, they are going to do 10 sit-ups. The PE teacher stands at the front of the gym near the stage as the students complete their jogging and sit-ups. The PE teacher says, "Come on, almost done." Followed by, "You only have one minute left."

Once the students finish, the PE teacher tells the students that the next activity they are going to complete includes a series of push-ups and jogging. The PE teacher says, "Let's get ready here." The PE teacher starts the students on the next activity of jogging and push-ups. The PE teacher asks one of the students, "Are you hurt?" The student replies, "No, just a little tired." The PE teacher tells the class, "Finish this, and you get a 2-minute break."

At approximately 9:13 a.m. the students end the jogging and push-ups and get a 2-minute break. The next activity, the PE teacher has the students jog back and forth to the other side of the gym, and when they get back to their starting spot, the students hold a plank for 10-seconds. The PE teacher says, “Almost done, then you get a 3-minute break.”

At approximately 9:17 a.m. the PE teacher tells the students to take a break and that they are done with that activity. The PE teacher tells the students that they can grab a drink of water if they need it before they move on to the next activity. Some of the students use the 3-minute break to have a seat at the center of the basketball court.

At approximately 9:20 a.m. the PE teacher has all the students meet at the center of the basketball court. The PE teacher says, “Thursday and Friday, I’m not going to be here.” The PE teacher follows by saying, “I expect excellent behavior while I’m out.” Then the PE teacher begins to tell the class that tomorrow is a make-up day for pictures. The PE teacher tells the students to stand up and move to the outside of the 3-point line on the basketball court and have a seat. The PE teacher says the next game is called “King of the Key.” The PE teacher says, “Now, if I make this first shot, I move to the next shot.” Followed by, “If I chance it, and miss, I have to stop and go back.” The PE teacher says, “You must take your first shot here.” The PE teacher ends by saying to the class, “This is simple, right. Any questions?”

At approximately 9:24 a.m. the PE teacher explains the next game “Knockout.” The PE teacher tells two students in the class to stand up and demonstrate how the game is played. The two students stand at the free throw line. The PE teacher explains to the class that if the first student misses their shot, then the second person standing in line must make their shot before the first person in the line makes their shot, and if the second person makes it first then the first person in line is knocked out.

At approximately 9:27 a.m. the PE teacher has all the students stand up, and they line up to begin playing King of the Key. The PE teacher walks around and talks to some of the students in the class. The PE teacher says, “Hey, if you’re not shooting, you need to be rebounding.” During the King of the Key game, the PE teacher uses the following language to communicate to the students in the class:

“Do you remember this game?”

“It’s good.”

“Alright, nice shot.”

“This is it; it’s going in, I have a feeling.”

“Hold it for a second.”

“You have to move over there to shoot.”

“Take your time, it’s not a hot potato.”

“Again, if it was easy, they wouldn’t pay professionals millions of dollars.”

“Use the power in your legs.”

At approximately 9:40 a.m. the students begin playing the game Knockout.

During the Knockout game, the PE teacher uses the following language to communicate to the students in the class:

“Here we go, let’s play.”

“Nice job.”

“Alright, I like it, I like it.”

“Everybody good?”

“Your shots are good.”

“Go to the back of the line.”

“Nice follow through on your shot.”

“That’s okay, try again.”

“There’s nothing you could do about that one.”

The PE class ends with the PE teacher saying, “Hold please.” The PE teacher asks the students to help put the basketballs away, and then the students go to the locker room to get their belongings before the PE class ends.



Photo 1: Basketballs were the only pieces of equipment that were used during the PE class.





## Data Collector: Aaron Thompson

**Site: Elementary School (K-5)**

**Location: Central New Hampshire**

**Teacher: Participant 13M**

**Date: Tuesday, November 15, 2022**

**Start: 12:19 p.m.**

**End: 1:00 p.m.**

Background: The location for this class is in the gym. There are less than 20 students in the class. The students begin class with a warmup that includes jogging around the basketball court. The first activity being played is Sheep Tag and the second activity is called Home Base Stretches. The second activity being played is Field Hockey. The class concludes with the students playing the game Shark Attack.

Observation: The Physical Education (PE) class starts at approximately 12:19 p.m. The PE teacher plays the song “Dynamite” by BTS. The students enter the gym, and they put their water bottles on the bench. The students begin class by jogging around the basketball court for their warm-up activity. After the students finish their warm-up, they meet at the center of the gym and the PE teacher goes over the schedule and activities that they will be participating in today for class. The PE teacher tells the researcher that this is his 5th grade class.

At approximately 12:27 p.m. the class begins their first game called Sheep Tag. The PE teacher tells the class that out of bounds is the basketball court lines. The game starts with the PE teacher playing the song, “Wake Me Up” by Avicii. Some of the students in the class are using a foam blue stick to tag other students in the class. Once a student is tagged, they sit on the ground. There are two other students in the game that have an orange foam ball, and they tag the students that are sitting on the ground. Once a student sitting on the ground has been tagged by the student with the orange ball, they stand up, and resume playing the game. During the Sheep Tag game, the PE teacher uses the following language to communicate to the students in the class:

“Ready, set, go.”

“Where are you supposed to be?”

“Come to the green line.”

“If you’ve been a tagger, go over there.”

“Okay, if you have a ball bring it to me.”

At the end of the game, the PE teacher says, “Nationwide” and the students respond, “Is on your side.” The students transition from Sheep Tag to Field Hockey, and the PE teacher says, “Let’s sit on the green line.” The PE teacher asks the class, “What is the difference between Field Hockey and Ice Hockey?” The PE teacher tells the class, “You can only use one side of the Field Hockey stick, unlike Hockey where

you can use both sides of the stick.” The PE teacher explains to the class that they are not allowed to use the round side of the stick. The PE teacher tells the class that they cannot use their feet in Field Hockey. The PE teacher reviews some safety rules with the class. The PE teacher tells the students that they cannot raise the field hockey stick above their stomach to hit the ball, so that they do not accidentally hit another student in the class in the head. The PE teacher ends with telling the students to go pick out a stick from the bucket that they will play the game with. The students return to their original spots, and the PE teacher shows the students in the class how to properly hold the field hockey stick in their hands.

At approximately 12:41 p.m. a paraprofessional/assistant teacher enters the gym with a student. The PE teacher tells the students that they are going to work on some drills before they play a field hockey game. The PE teacher explains what a “V-Grip” is and how “Dribbling, using one side of the stick” works. The PE teacher then tells the students to spread out and practice rolling the ball with the field hockey stick around the gym. The PE teacher walks around the gym and works with some of the students individually on how to better hold the field hockey stick and how to hit and roll the ball using their field hockey stick. As the students practice this skill and activity, the PE teacher plays the song, “Imperium” by Madeon. When the song ends, the PE teacher says, “Throw your stick on the ground.” The PE teacher says, “We are going to speed things up a little bit.” The PE teacher tells the students that some of the students are going to play defense for the next activity. The PE teacher reminds the students that they cannot use their feet to touch or move the ball.

At approximately 12:47 p.m. the students begin the next activity/game using the field hockey sticks. Half of the students are “Sharks” and are playing defense. The other half of the class is trying to use their stick to keep control of the ball without the defender taking it away from their possession. The paraprofessional in the class walks around during this activity and helps some of the students properly hold the field hockey stick. The PE teacher uses the following language to communicate to the students in the class during this activity:

“Everyone back to the line.”

“Okay, you ready?”

“Sharks to the circle.”

“Try to keep it inside the lines.”

“Let’s go sharks, let’s go.”

“Let’s work on those skills.”

“Come on sharks.”

“Keep it low.”

“Are you okay?”

“Alright, here we go.”

“Four sharks are in the middle.”

“Here we go.”

“Good try, good hustle.”

“Whoa! There you go.”

The game ends and the PE teacher assigns four new students to be the “Sharks” for the next game. To start the next game, the PE teacher plays the song, “Better When I’m Dancing” by Meghan Trainor. Once this song ends, the PE teacher tells the class, “Put your ball in the little bucket” and “Come back to the middle of the gym.” The class ends with the students meeting in the middle of the gym, and the PE teacher tells the students, “I feel really good about the Field Hockey games that are starting tomorrow.” The PE teacher reviews some of the safety rules, and says, “Really great job today.” The students in the class line up at the door at approximately 1:01 p.m. and the PE class ends with the PE teacher telling the students, “See you tomorrow.”

Photo 1: Equipment used for Sheep Tag.





Photo 2: Equipment used for Field Hockey (sticks).



Photo 3: Equipment used for Field Hockey (balls).



## Data Collector: Aaron Thompson

**Site: High School (9-12)**

**Location: Central New Hampshire**

**Teacher: Participant 14N**

**Date: Monday, November 21, 2022**

**Start: 11:02 a.m.**

**End: 11:52 a.m.**

Background: The location for this class is in the gym. There are approximately 25 students in the PE class. The students in this PE class play the game Pillow Polo.

Observation: The Physical Education (PE) class starts at approximately 11:02 a.m. The students enter the gym and go straight to the locker room to drop off their personal belongings and to change for PE class. The PE teacher goes into the girl's locker room for approximately 7 minutes.

At approximately 11:09 a.m. the PE teacher exits the girl's locker room and tells the students in the class to line up for attendance. As the students are lining up for attendance, the PE teacher asks, "What's your favorite Thanksgiving food item?" The PE teacher walks up and down each of the five lines and the students tell the PE teacher their favorite Thanksgiving food item. The PE teacher finishes taking attendance and tells the class that the most favorite food item was mashed potatoes for this class. The PE teacher then tells the class to divide up amongst themselves into two groups, those that like cranberry sauce and those that do not. The PE teacher says, "This is really interesting as this unfolds." The PE teacher then has one of the groups divide themselves into two additional groups, those that like canned cranberry sauce, and those that like organic homemade cranberry sauce.

At approximately 11:17 a.m. the PE teacher tells the class to circle up near the right corner of the basketball court to meet as a class. The PE teacher tells the class that the game they are playing today is called Pillow Polo. The PE teacher reviews the rules and safety procedures for the game. The PE teacher tells the students, "No head shots." The PE teacher adds, "Goal keepers, where is your box?" The PE teacher says, "You have to tap it in."

At approximately 11:22 a.m. the game begins. During the game, the PE teacher uses the following language to communicate to students in the class:

"Don't try to kick it like soccer."

"I like this group, and I think you work relatively well together."

"I will allow you to stand with your buddy."

"If you are a number 1, raise your hand."

"Team 2 grab yellow."

"Spread out."

“Good job.”

“Look at you tap it.”

“Bend those knees.”

“There you go, you can use the wall.”

After the first game, the PE teacher rotates the third team in to play the game. The winning team in the first game stays on the court.

At approximately 11:28 a.m. the second game begins. The PE teacher uses the following language during the second game to communicate to the students in the class:

“That’s better.”

“Don’t get frustrated, it’s alright.”

“Good, spread out, swing it.”

“Work together with the Blue team.”

“Watch the elbows.”

“You’re getting much better at this.”

“Tap, tap, tap it in.”

“There you go.”

The PE teacher also uses the first name of each student in the class every time she communicates to them and provides them with feedback.

At approximately 11:31 a.m. the second game ends, and the PE teacher rotates in the next team, and the winners in the previous game stay on the court. The PE teacher tells the class that the yellow team is going to play the blue team. During the third game, the PE teacher uses the following language to communicate to the students in the class:

“Skill and improvement.”

“You’re doing a great job.”

“Get it.”

“Use the stick.”

“Yes, break away.”

“Play on.”

“You’re getting sucked into the middle, spread out.”

During the third game, the PE teacher tells the researcher that there are grades 9-12 in this class, but mostly 9th and 10th graders. Only one or two 11th and 12th graders.

At approximately 11:36 a.m. the game ends, and the PE teacher rotates in the next team for the following game. Before the next game starts, the PE teacher tells the class that if they need to go grab a drink, they can go to the drinking fountain to get some water. During the game the PE teacher uses the following language to communicate to the students in the class:

“That’s it.”

“The subconscious kicks in every now and then.”

“Problem solving.”

“Yea, that’s it. Carry it.”

“That’s perfect timing.”

“20 seconds left.”

“Nice save.”

“That’s why we don’t kick it.”

At approximately 11:41 a.m. the PE teacher ends the game, and the next team rotates into play on the basketball court. The foam ball that’s being used for the game gets a tear on the side, and the PE teacher tapes it up with duct tape to fix it. The winning team from the previous game stays on the court and plays the new team that’s entering the game. During the next game, the PE teacher uses the following language to communicate to the students in the class:

“Hey, they don’t have to have a goalie.”

“Good choice.”

“Keep it low, bend your knees.”

“Remember when I said earlier that you don’t know your own strength.”

“Look to find a teammate.”

“Good job, thank you for tapping it.”

“That’s a good tap, that’s a legal tap.”

“Nice pass, you’re doing just fine.”

“No, no, no, don’t kick it like that.”

“Nice shot, watch the elbow.”

At approximately 11:46 a.m. the PE teacher tells the class to make their last switch, and that the yellow team is off, and the Blue team is on. The team waiting on the sideline enters the game for the final match and last round. During the last game, the PE teacher uses the following language to communicate to the students in the class:

“Keep it on your side and roll it next time.”

“Keep going, only a few minutes left.”

“There you go.”

“15 seconds to go.”

“Last shot, freeze, good timing.”

At approximately 11:49 a.m. the last game ends, and the PE teacher tells the students in the class to help clean up and put away the equipment that was used to play the game today. The foam sticks and foam ball go into a blue mesh bag, and the students work together to get everything cleaned up. The PE teacher tells one of the students to watch their language and not use profanity. The class ends with the students walking around the gym floor and trying to get out some of the scuff marks on the floor. The PE teacher

also brings the class in, and they meet before the bell rings. The PE teacher asks the class what worked well for them today during the game. The PE teacher asks the class if slowing down during the game while they were playing helped them more today. The PE teacher asks what the score was from the games and asks the students who won their games. The bell rings at 11:52 a.m. and the class period ends, and the students leave the gym.



Photo 1: Equipment used to play the game Pillow Polo.

