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Physical Activity and Movement In the Classroom Setting

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Running head: PHYSICAL ACTIVITY AND MOVEMENT IN THE CLASSROOM
SETTING

Physical Activity and Movement In the Classroom Setting

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S.I.T Samoa

Spring 2017

SETTING



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Abstract

Around the world historically special needs persons were not always recognized as equals. Physical activity has multiple benefits physically and mentally to promote personal growth. This study examined the implementation of physical activity energizers to enhance class-based learning. The Aoga Fiamalamalama School for the intellectually handicapped was the site for this study which examined programs implemented in the organization to help Samoans with special needs. This research was based around observations and analysis of the energizers and the effects of these activities on approximately 27 students' active learning in the classroom setting and the feedback from administration and staff. Six (6) physical activity energizers were implemented to increase class participation overall throughout six (6) school days. The physical activity energizers were Morning Warm Up, Wiggles, Memory Lane, "The 12 Days of Fitness", Red light, Green light, and the Name and Action Game. Analysis reveals PA energizers did increase class participation overall throughout the school day.

Keywords: Special needs, physical activity, energizers, class-based learning

Dedication

This research is dedicated to Roland W. Smith, one of my Special Olympics athletes I had the privilege to coach for six years. Roland quite literally flew into my heart six years ago when I entered onto the pool deck to coach the Trudeau Tigers. On March 8th, 2017 after succumbing to injuries sustained in a car accident on March 2nd he passed away after a long hard fight. Though he is not with us anymore the memories of his facts about wolves and laughing about his swimsuit malfunctions will not be forgotten. Roland was one who showed me the impossible is possible. This project is for you Roland and all those you inspired throughout your life and will continue to in your memory.

Acknowledgements

This project would not have been possible without the guidance and support from the staff, administration, and students at Aoga Fiamalamalama. Thank you for providing me the opportunity to work with incredible students and staff. You have touched my life. The time I spent with you will remain with me forever. I would like to thank Sharon Suhren, the Principal at Aoga Fiamalamalama for advising me through this research period. I would like to thank Jackie Fa'asisila for her endless support and encouragement throughout this program. And lastly I would like to thank my family for making this experience possible and unconditionally supporting me in all I do.

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Introduction

The objective of this study is to identify positive changes made in educating and treatment of special needs persons at Aoga Fiamalamalama (AFM) in relation to teachers with the implementation of physical activity (PA) in the classroom setting. The problem that will be examined in this study is to see if special needs persons are given opportunities to develop while taking into account the how students' might benefit PA/movement in the classroom. Researchers such as Wright, Duquesnay, Anzman-Frasca, Chomitz, Chui, Economos, Langevin, Nelson, & Sacheck (2016), Bailey & DiPerna (2015), Haegele & Porretta (2015), and Miramontez & Schwartz (2016) found a significant relationship between academic performance and PA in the classroom among primary school students.

Education is the foundation for individuals to have successful and independent lives. "Schools are key contributors to a physically active lifestyle as students accumulate a majority of their daily PA at school" (Orlowski, Lorson, Lyon, & Minoughan, 2013 p. 47). PA is beneficial and can be used in and outside of school. Within the classroom PA can be used as an instructional tool to improve learning and energy levels. A tremendous amount of importance has been placed on it around the world. There has been upward movement for special needs persons with advancements in health care, education, social services, social work, and other areas, and efforts continue (Samoa National Policy on Disability, 2009 p. 3). In Samoa, the Compulsory Education Act (1992) established inclusive education for all children. In 1998, a Special Needs Education Advisory Committee was established within the Ministry of Education to provide support for children with disabilities and their families. The first group of teachers majoring in Special Needs Education was formed in the year 2000. The Ministry of Sports, Education, and Culture (MESC) established a "Samoa Sports Ability Workshop", which allowed the

development of Samoa Sports Committee to work with special needs organizations and schools (Samoa National Policy on Disability, 2009 p. 3). These developments are important initial steps to providing children with special needs the resources they deserve.

Sharon Suhren the principal at AFM acknowledged the lack of properly trained education professionals in special needs education (Suhren, Personal Communication, March 14, 2017).

There are currently only four schools for the intellectually handicapped in Samoa lacking qualified teachers. The teachers are not educated or exposed to children with special needs while in teaching school and this factor makes it challenging for them to create effective lesson plans. Designing creative individualized lesson plans is a challenge for any teachers, but even more so for teachers with little or no training and/or exposure to special needs children are doubly challenged. Dealing with ways each child learns differently is especially important when working with persons with disabilities. The ability to create lesson plans that are beneficial to the different learning styles is important. This research looks at AFM and actions taken by teachers and Special Olympics to implement PA in the classroom setting. It investigated the benefits of implementing structured PA energizers (Kindergarten - 5th Grade Classroom Energizers, 2015) into the school day and the improvements and outcomes on students' on task behavior and performance.

Physical Activity and Movement

PA can help prevent childhood obesity, and contribute to overall better physical and cognitive health. School can implement the recommended 60 minute per day of PA, which the Fueling Learning through Exercise (FLEX) study did to maximize innovative school based PA (PA) on children (Wright, Duquesnay, Anzman-Frasca, Chomitz, Chui, Economos, Langevin, Nelson, & Satchek, 2016). The variables that were examined were PA through a 7-day accelerometry, cognitive assessments, and academic achievement through state standardized test scores. Height, weight, psychosocial factors and dietary intake were also taken into account. The participants in this study were from 24 public elementary schools from low-income areas and ethnically diverse communities in Massachusetts (Wright, Duquesnay, Anzman-Frasca, Chomitz, Chui, Economos, Langevin, Nelson, & Satchek, 2016).

The results of the above study suggest disparities in PA available in low-income areas, who are less likely to have PE teachers. These findings, however, indicate a need for structured recess and more before and after school classroom based PA opportunities. The implementation of PA programs is fundamental to create and expand resources and programs to address health disparities and help children develop healthy lifestyles (Wright, Duquesnay, Anzman-Frasca, Chomitz, Chui, Economos, Langevin, Nelson, & Satchek, 2016). PA has multiple benefits physically and mentally to promote personal growth. The use of daily PA, will continue to teach students how to live healthy lives and to embrace an interactive environment both at school and home

PA cannot always be implemented directly into the classroom settings effectively, but other helpful activities can be implemented. A study by Bailey and DiPerna (2015) aimed to determine the effects of classroom-based exercise breaks on students' levels of PA throughout

the school day. The study's primary hypothesis was that the implementation of the Energizers program would increase students' school-based PA levels and be viewed as acceptable by teachers and students (Bailey & DiPerna, 2015).

The study measured PA levels, treatment fidelity, and intervention acceptability. PA levels were documented through the students wearing New-Lifestyle Accelerometer Monitors throughout the school day for seven-day cycle. Treatment fidelity was observed in the implementation of classroom-based energizers once a week and the completion of a teacher's a weekly self-report. Teachers implemented energizer activities twice a day during intervention phase and completing activities instructions were given or 30 minutes before or after scheduled breaks such as lunch, recess, PE, and implemented into the daily classroom schedule. Teachers and students completed brief, anonymous ratings on their perceptions of the in class energizers and PA following their implementation. The energizer sessions were approximately 11.42 minutes long. During observation sessions the mean number of students engaged in the activity was 91.48%. The implementation of energizers in the classroom significantly increased participants' activity levels. Teachers reported energizers could be implemented into the class with ease and little disruption and did not negatively affect classroom instruction time (Bailey & DiPerna, 2015). A set of PA energizers implemented by the researchers allowed for all individuals specifically in this population to be recognized. Students participated actively which helped their developmental process, increased participation and built confidence in the classroom setting.

The Center for Disease Control and Prevention (2011) recognizes living a life with PA from an early age can lessen the chances of an individual developing obesity, diabetes and cardiovascular disease (Centers for Disease Control and Prevention, 2011). Many times though

individuals with disabilities are not given the same resources to learn how to live healthy lifestyles (Haegele & Porretta, 2015). Often times person with disabilities are less physically active due to limitations and restrictions. Haegele and Porretta (2015) reviewed published research literature on PA for school aged individuals with visual impairments. Eighteen (18) studies were assessed, 5 were descriptive, 6 correlational, and 7 were interventions (Haegele & Porretta, 2015). The major findings of this literature review suggest that low PA levels of school age-individuals with visual impairments may be a result of perceived perceptions on participation barriers rather than visual awareness or educational settings (Haegele & Porretta, 2015).

The labeling of disabled persons based on their disability creates a space where their independence is overlooked, despite their capabilities to succeed. Labeling happens frequently and has resulted in an overall inequality. Sometimes new and different ways are needed to give persons with disabilities the resources they need. Miramontez and Schwartz (2016) examined the effect of adult-directed PA on the on-task behavior of children with Autism Spectrum Disorder. Three male students who attended full day inclusive kindergarten participated in this study (Miramontez & Schwartz, 2016). The implementation of PA energizers allows for new resources to become available for them to better express themselves. This allows for staff and administration to have a better understanding and ability to create lesson plans that are beneficial to their learning style that can be implemented in and outside of the classroom.

During approximately the last five minutes of morning circle the entire class participated in one of the three activities with different amounts of PA. The activities were yoga, dance party, and reading a book and the teacher assigned them randomly. The on-task data was recorded for each participant within the first five minutes of the journal writing activity. The results found that

following activities with general movement such as dancing and yoga prior to journaling led to significantly higher levels of on task participants. Teachers following this exercise reported they would use these activities and students indicated they preferred the more physically active activities. This study concludes that students with ASD could potentially benefit from PA in an instructional day (Miramontez & Schwartz, 2016).

Structured PA and movement in the classroom can lead to higher participation, increased academic understanding, and personal growth. A research project at AFM by Katz (2007) examined the effects a program based around creative movement and music for the disabled in Samoa. Nine students ages 14-24 participated in the study, in addition to one 32-year-old student. The research was conducted for four hours a day for three weeks. Students spent one hour each day participating in a program centered around creative movement games, dance, and music created by the researcher. The activities were Warm Up: stretches, Head, Shoulders, Knees, and Toes, The Hokey Pokey, Name and Action Game, Animals Across the Floor, Old MacDonald, Red Light, Green Light, Color Pick-Up, Musical Names, Go Across the Floor and Be..., Experimenting with Opposites, Music and Movement Making, Number Matching and Experimentation, The Name Game, and Freeze Dance. The researcher observed and analyzed of these activities from the students and teachers. Interviews were also conducted with administration regarding these activities (Katz, 2007).

Katz concluded is alternative methods are essential in schools for disabled. Teachers must use different strategies to teach a variety of students who learn in different ways. These activities can improve students' abilities in and out of the classroom and the education becomes more inclusive. This program illustrated the importance and effectiveness of teaching alternative methods (Katz, 2007).

The previous studies discussed above show a correlation between PA and academic performance. Bailey and DiPerna's study theoretically implies the implementation of energizers in the classroom significantly increased participants' activity levels (Bailey & DiPerna, 2015). Perceived perceptions have also been shown to create barriers that result in low PA levels of school age individuals with visual impairments in the educational setting (Haegele & Porretta, 2015). The use of PA and movement has led to significantly high levels of on task participants (Miramontez & Schwartz, 2016). Schools for the intellectually handicapped are intended to provide equal education, but teachers must use different strategies to teach a variety of students who learn in different ways to effectively give them an equal and inclusive education (Katz, 2007).

Method

Participants

A total of 27 students participated in the program although attendance varied greatly on a day-to-day basis. The students' ages ranged from 5 to 34 years of age. The students presented a range of disabilities including Down Syndrome, Mild Mental Retardation, Cerebral Palsy, Autism, and "Slow learners". The students were recruited through AFM and informed consent was obtained from Sharon Suhren the Principal. To ensure confidentiality all students names have been changed to protect their identity. Research was conducted primarily in two classes, the 1st years and 3rd years to allow for students to feel comfortable in participating in the energizers over the course of a week and a half so observations were documented comprehensively and systematically. On sports day and following teatime anywhere between 15 to 20 students of the entire student body participated in the PA energizers (Kindergarten - 5th Grade Classroom Energizers, 2015) between scheduled lesson plans and activities.

Assessment Measures

Physical Activity Energizers (Appendix A; Kindergarten - 5th Grade Classroom Energizers, 2015). Six (6) PA energizers were implemented to increase class participation overall throughout the school day. The PA energizers were Morning Warm Up, Wiggles, Memory Lane, “The 12 Days of Fitness”, Red light, Green light, and the Name and Action Game. The PA energizers were executed through having the students’ form a circle or open formation in the classroom. Directions were then administered and explained to the students’ about the energizer. An example action from the “12 Days of Fitness” is, “3 muscle poses”. The PA energizers took approximately 5 to 10 minutes each to complete.

Interviews (Appendix B & C). Two sets of interview questions were asked. The interview questions were Interview Questions for Teachers and Organizations and Interview Questions for Teachers Following the Implementation of in Class Energizers. The interviews took place in an office or quiet room. An example question from Interview Questions for Teachers and Organizations is, “Do you work with outside resources/ organizations/or programs? If so what opportunities have they presented for the students in and out of the classroom?”. These questions were asked of the principal at AFM and the Administration Finance Officer of Special Olympics Samoa. The interviews lasted approximately 45 minutes each. An example question from Interview Questions for Teachers Following the Implementation of in Class Energizers is, “Do you think you will use any of these PA energizers in the classroom in the future?”.

Procedure

The research was conducted in the main school building where the principal’s office was located and in the front building where morning greetings occur. The students were recruited

through AFM and informed consent was obtained from Sharon Suhren, the Principal. In order to ensure confidentiality all students names have been changed to protect their identity. All the participants were notified at the beginning of each PA energizer that their participation in the study was completely voluntary and they had the right to withdraw at any point in time.

Following the completion of each PA energizer the students and staff were thanked for their participation. The research was based around the observations and analyses of the PA energizers on students on task behavior in the classroom setting. Interviews were conducted with the principal at AFM, 1 teacher, and the finance administration officer of Special Olympics Samoa. Interviews discussed the current programs based around PA, implementation of movement in the classroom, and the limitations and abilities of students.

There are several limitations of the present study. One of the main limitations of the study was the fact that the sample size was relatively small. The sample size was efficient enough to draw observations and analysis from but it made it difficult to see if there was actually significance in the PA energizers being implemented. It would have been more valuable if the sample size was larger and collected from several schools for the intellectually handicapped to get a more accurate representation of the student population. Attendance from students was often times infrequent, which made it hard to document systematic observations due to the varying number. The allotted time to complete this research served as a constraint due to schools were out for semester break for the first week of research time. The observations collected and analysis would have been more comprehensive if research had been conducted over a longer period of time. Lastly, the language barrier was a limitation. Throughout the energizers it was often unclear if the students understood what the researcher was saying. It would have been more valuable if the activities were conducted completely in Samoan to get more accurate

observations of the students' activity and participation levels. Observations from the implementation of PA energizers are discussed in the following section.

Results

Levels of Confidence and Perception on Participation Barriers

Sitting around a small circle table on small chairs close to the ground we embraced the songs being sung in distant classrooms. Between every student there was a teacher seated beside him or her. The three students were filled with energy radiating off one another giving little attention to the activity-taking place. I began to wiggle my fingers in the air excessively with a smile. Immediately Frances raised her arms and began to wiggle her fingers greatly while staring intently at me. I then pointed to my hands and began shaking them uncontrollably. The smiles grew bigger and bigger as we added in our arms, shoulders, head, stomach, legs, and feet. James who often times doesn't participate began to shake his arms and stomp his feet as he looked intently at me with a straight face. After wiggling our whole body I smiled and signaled bottom to top with my hands. The second time through we started with stomping our feet, which gave off the sound of waves crashing loudly on the reef. For each new body part added I stated it in English and pointed to it. The energizer ended with all of us shaking our entire bodies like fish out of water almost falling out of our chairs with smiles painted across our faces.

The PA energizers were administered over a short period of time but the confidence gained and participation put forth was evident. They were developed to enhance class-based participation throughout the school day. It was hypothesized that there would be a significant difference between the implementation of PA energizers in the classroom participation in classes following the implementation of energizers. Levels of confidence and perception on participation barriers were areas focused on during the implementation of energizers. The energizers were structured to allow students to be innovative in the way on which they carry out the energizers. This factor allowed for independence in the way in which they moved their body, actions they chose to do, rhythm, and the ability to make choices on their own. When participating in the energizers the student was free to implement exercises and movements they enjoyed such as in the Name and Action game where they got to choose an action to go with their name. In every

energizer, each student was given the opportunity to explore and implement movement they enjoyed and that expressed who they were.

The different exercises in the energizers allowed for the students to be innovative and independent in their self-expression. Having the ability to do their own muscle poses in the “12 Days of Fitness” is another example of the opportunities to express themselves. In the classroom setting, students need confidence to participate actively in all the lessons. Giving the students the opportunity to make choices for themselves in these energizers further builds their confidence to participate in other classroom related activities. Through creating a safe space where they can express themselves such as in these energizers can be transferred into academic class activities where their new acquired confidence levels will reflect their work in and out of the classroom.

Confidence levels are not always the same between students and this reflection can potentially be due to the perceptions that exist in regards to the abilities students are believed to have specifically in the classroom setting. Unlike the academic aspect which is mainly based around performance and being able to recite information, these energizers allowed for the students to be active participants and to express themselves in a manner that could not be graded. These energizers were developed to allow for participation from all students and staff. These energizers allowed for the students to come up with movements and actions on their own building confidence in what they do as well as breaking perceived perceptions that may have been restricting them or the activities that they have been previously participated in. After PA energizers were carried out multiple times throughout the research, students were more enthusiastic and assertive in the energizers and the actions they carried out. These PA energizers gave students the ability to gain confidence in themselves and their actions and to express

themselves in a way in which in the classroom that often does not occur allowing for perceived perceptions to be eliminated.

Physical Abilities and Growth

Sports day is a day where the students spend the day actively participating in different PA lessons. We all sit in the open front building split into red and yellow teams. Everyone wears a jersey that represents the team they are on. The students sit patiently watching each small group go into the field to compete in the relay race. The groups are anxious to participate and are laughing and cheering on their teammates and classmates. To keep them attentive I led the Morning Warm Up, "12 Days of Fitness", and Name and Action game between the sport activities that were scheduled. During the first activity there were many blank looks and hesitation to participate. Cameron a young boy was actively participating so I said "come up and lead this with me!". He came up with little hesitation and began jogging in place in slow motion exaggerating each step then quickly rotating between the two. All the students began to smile and imitate the silly action we were doing at the front of the group. The next activity was the "12 Days of Fitness." All the students were watching intensely. We began at 12 and worked our way down. There was great confusion on how many of each action to do, and there was a disarray of eyes looking at each other confused when to stop, but one senior student shouted out "12, 11, 10, 9..." at the start of each action in Samoan. When we reached 1 stork pose a few students yelled "again" and we worked from 1 to 12. The second time there were smiles and students yelled out the numbers as they did the actions adding in moves before each action as we progressed through the energizer. The room was filled with different interpretations of the exercises and the students incorporated their own movements filling the room with laughter and smiles.

The PA energizers were developed to enhance class-based participation through the implementation of PA and movement into the classroom. Conducting energizers on the basis of PA had benefits in physical coordination, promoting healthy habits, and self-expression. In the short time allotted for this research there was obvious physical growth and development. As activities were repeated, students were more aware of different parts of the body and the numerous functions they have in different PA movements.

Different energizers allowed the students to focus on the different movements and increase their class-based participation. It promoted further physical development that can be implemented in class activities with coordination and increased knowledge on physical abilities.

This gave the students increased knowledge on how they can actively participate in activities in a variety of settings. Through the energizers the students are becoming more familiarized with the function of their body. The more knowledge gained in this area allows them to participate in a wide range of activities ranging from daily tasks, PA, and simple functions. Doing physical energizer activities allows for interactive lesson plans to be implemented for the students to better understand the material being presented. Class activities currently are heavily dependent on interactive activities through the creative movement of music with actions.

Incorporating PA into class-based learning gives more knowledge on how and why the actions occur and are relevant. The use of the Wiggles and Memory lane energizer helped to educate the students on their body parts and motions to fully understand the actions implemented into the songs and interactive activities currently being used in the classroom such as head, shoulder, knees, and toes, greetings, and learning directions and sizes. Doing these PA energizers helps to further develop motor skills, heighten awareness on bodily functions, physical capabilities and increase their development through facilitated energizers between structured lessons. Active learning through PA energizers increases their understanding on fundamental concepts in class-based activities with relation to their body, its functions, and the importance of utilizing them in all aspects of their lives.

Physical Activity and Movement based learning

Sitting in the back of the open room as a shadow in their daily routine, I witnessed movement being the largest factor of their day. The greetings are communicated through song and hand motions. The morning greetings end with dancing that students stand proudly at the front and lead. The teachers are facilitators using interactive lesson plans through beautiful songs that flow into each activity like the wind blowing through the trees. Movement is not a new aspect in interactive learning, but is a collective theme used to communicate information. A teacher said when I asked about the morning routine "it has been this way since the beginning and is the most effective way to...Communicate information". Eyes are open to inclusive education based around finding effective ways to teach in the most efficient ways. Physical activity is another form of movement that has

recently been incorporated through dance and sport. Sitting in the classroom leading energizers was not a foreign activity. The students were eager to stand and imitate the actions presented in front of them. Standing in the front of the room calling out the commands "high five right, high five left..." and demonstrating them with a student to the small group of twos in front of us was just the same. The students were eager to continue the activity and I continued to call out the order for four rounds. Each round being faster than the previous they continued to move rapidly recalling the physical action and carrying out the movements.

PA energizers brought a new form of movement into the classroom. The energizers made it evident like the implementation of music that they positively made improvements and outcomes on the students on task behavior and performance. These structured activities notably increased participation levels and on task behavior following them being executed. The implementation of the PA energizers allowed for the students to gain a more complete understanding of their body, physical movement, as well as healthy habits. These energizers helped facilitate communication among students to work together helping them build skills to be more independent and self-reliant in and out of the classroom.

The school day is currently structured with seven classes all 30 minutes in length. This class schedule is set up to try and keep the students' active and participating. Specifically, with the youngest group even 30 minutes is too long to keep them on task at times. The use of music typically brings attention and participation in, but is mainly stationary. Schools days are long and typically consist of sitting for many hours. This type of teaching is not the most effective and teachers and staff have implemented the creative aspect of music to help aid this. Implementing PA energizers between classes appeared to create higher participation and on task behavior from the students.

Physical activity energizers such as the Wiggles, Name and Action game, and Red light, Green light gave them the opportunity to be active and move throughout the classroom without

being disruptive. These short activities being administered between classes a few times a day increased participation in the classes it followed. These short five minute energizers allowed for the students to get up and move taking into account that not all of them have the attention span to sit at a desk for six hours a day. Allowing the students to get up in between classes and actively participate in an activity with movement allows for them to participate in activities further develop motor skills, heightened awareness on bodily functions, physical capabilities and increase their development.

The Name and Action game allows for them to communicate who they are with an action they like, but also to acknowledge others and take into account of listening and recalling theirs as well. The use of Red light, Green light makes the students have to remember the signals but also listen to their peer call the calls out and respond to them appropriately. PA energizers allow for PA to be implemented in the classroom to allow students to grow as an individual in their abilities, understanding, communication, and overall development. Physical activity energizers are beneficial in furthering inclusive education to allows for diverse lessons plans to be established that are reflective of how the student learns best.

Discussion

The findings from the present study did support the hypothesis. It was hypothesized the implementation of PA energizers would increase in class participation and on task behavior. A series of observations, systematic analysis, and interviews conducted contributed greatly to examining the benefits of PA energizers. This is in agreement with previous research (Bailey & DiPerna, 2015) that showed the implementation of energizers in the classroom significantly increased participants' activity levels. Analysis of observations reveal the implementation of PA energizers did increase class participation overall throughout the school day.

However, conducting PA energizers sometimes resulted in confusion between teachers and the researcher. Though the staff and administration were debriefed on the nature of the study there was the miscommunication that the researcher developed energizers specific for each class rather than a PA energizers to be conducted between classes to increase student on task performance and participation during the classes. The implementation of the PA energizers themselves did significantly increase class participation from observations documented by the researcher.

In an interview with Sharon Suhren, the principal at AFM she states “the mission of the school is to provide inclusive education, which is to be used in all aspects of students lives in and outside of the classroom” (Suhren, Personal Communication, March 14, 2017). She went in even more detail on the importance of the development of personal lesson plans for each student due to learning differences lesson plans specific to each child to enhance their ability to learn. While explaining this she emphasized the importance of being aware of the students’ attention span when developing appropriate lesson plans while taking this factor into consideration. With the implementation of PA energizers it was aimed at helping off task periods of time and enhancing class participation through structured periods of movement in the classroom throughout the school day.

Teachers and students appeared to be receptive to the implementation of PA energizers throughout the school day. The teacher of the youngest group and the 3rd years asked for copies of the lesson plan developed by the researcher to incorporate and modify into their lesson plans in the future and for sports day. In an interview with Richard, the financial administration officer of Special Olympics Samoa spoke of the purpose of the organization is to empower individuals with special needs. Richard stated, “one of the main focuses is helping them have this confidence

to stand in front of people, speak out, be independent, and be a representative of Special Olympics”(Liu, Personal Communication April 20,2017). Throughout this present study it has become evident that a common theme is giving individuals with special needs the confidence to be independent in all aspects of their life.

AFM embodies this goal of instilling confidence through the inclusive education they strive to provide embodying movement currently in their curriculum through music and song. Though it was brought to the researchers attention that the sports day does need more outside support the staff and administration have begun to incorporate PA into the daily school schedule. In an interview with Maria Viliamu, a teacher at AFM she stressed the importance of the implementation of physical activities being brought inside the classroom. She went further to express it benefits the students’ participation and that the energizers were useful (Viliamu, Personal Communication, May 1, 2017). The feedback from staff, administration, and Special Olympics further supports that implementing PA in the classroom is crucial into helping individuals develop fully and giving them the confidence to participate and be independent in all aspects of their life.

Conclusion and Recommendations for further study

There has been tremendous progress in Samoa in relation to the movement towards empowering and giving children with disabilities opportunities. This study documents progress in Samoa in regards to the positive changes made in educating and treatment of disabled persons in relation to inclusive education with parents and teachers with the implementation of PA in the classroom setting. Following an interview with Sharon Suhren it was made evident special needs is still not an easy topic to discuss for the fact it is still commonly believed the reason behind special needs is due to curses rather than medical complications (Suhren, Personal

Communication, March 14, 2017). There has been tremendous growth since 1992 Compulsory Education Act was established creating inclusive education for all children.

The implementation of PA at AFM demonstrates the importance of implementing programs that take into account PA and movement in the classroom setting. It is crucial to develop a curriculum uses a variety of learning styles to address the diverse ways in which individuals with special needs may learn most effectively. As previously stated, teachers need take ownership in the classroom and create feasible independent lesson plans. Creating lesson plans that embody inclusive education with movement is not an easy task, but is one that is being worked on at AFM. This is evident with the weekly implementation of sports day that PA is being implements into inclusive education.

The implementation of PA energizers had noticeable effects on student participation and on task behavior. Teachers acknowledged that movement and interactive lesson plans has the highest participation rate in class based learning then traditional teaching methods. This was also true for the energizers implemented in this project as well. The staff and administration along with Special Olympics Samoa acknowledged the need for active and interactive activities to further give individuals the confidence, independence, and personal growth in and outside of the classroom.

Creating and implementing PA programs is not an easy task, as the students' ability levels have to be taken into consideration. Teachers are working to create individual lesson plans that are beneficial with the resources and knowledge they have currently. In future research could examine the university and education course profiles for special needs education and how they contribute to preparedness in the field following completion. Future researchers might study samples from multiple mainstream schools and schools for intellectually handicapped with daily

implementation of PA in the classroom. An interview with the Special Olympics team indicated that they do not come on Wednesday's as frequently as they had previously. A more in-depth look at organizations that partner with AFM and how much aid and time is being given to enhance their programs could also be useful.

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Participant Observations

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Aoga Fiamalamalama. April 25, 2017.

Aoga Fiamalamalama. April 26, 2017.

Aoga Fiamalamalama. April 27, 2017.

Aoga Fiamalamalama. April 28, 2017.

Aoga Fiamalamalama. May 1, 2017.

Appendix A

Morning Warm Up

FORMATION: Form a circle around perimeter of the room

EQUIPMENT: None

RULES/DIRECTIONS:

1. Have students begin with a series of simple activities lasting 30 seconds or more such as:
 - Jumping
 - Jogging in place
 - Flapping arms like a bird
 - Hopping
 - Making scissors
2. Following each activity with a basic stretching movement such as:
 - Reach for the sky
 - Butterfly stretch
 - Side stretch
 - Rotate ankles
 - Scratch your back stretch
3. Hold these stretches for 10-20 seconds.
4. Repeat a different simple activity followed by a new stretch for 4-5 rounds.

Wiggles

FORMATION: Standing at desks

EQUIPMENT: None

RULES/DIRECTIONS:

1. Jog in place doing the following activities.
2. The teacher/instructor signals the students to begin to wiggle their fingers.
3. Then their fingers and wrists.
4. Then their fingers, wrists, and forearms.
5. Then their fingers, wrists, forearms, and elbows.
6. Then their fingers, wrists, forearms, elbows, and shoulders.
7. Then their fingers, wrists, forearms, elbows, shoulders, and rib cage.
8. Then their fingers, wrists, forearms, elbows, shoulders, rib cage, and hips.
9. Then their fingers, wrists, forearms, elbows, shoulders, rib cage, hips, and knees.
10. Then their fingers, wrists, forearms, elbows, shoulders, rib cage, hips, knees, and head.

Memory Lane

FORMATION: Standing at desks with a partner

EQUIPMENT: None

RULES/DIRECTIONS:

1. Teacher/instructor calls out one task at a time and partners complete that task.
2. Task should be called out in the following order
 - High five right
 - High five left
 - Low five right
 - Low five left
 - High ten
 - Low ten
 - Backwards ten high
 - Backwards ten low
 - Tunnel ten
 - Sole of shoes right
 - Sole of shoes left
 - Elbow right
 - Elbow left
 - Both elbows
3. Partners repeat task beginning with the first task each time.
4. Have students repeat sequence as fast as possible with accuracy.

The 12 Days of Fitness

FORMATION: Standing at desks

EQUIPMENT: None

RULES/DIRECTIONS:

1. Students will act out the following fitness song
2. “On the first day of fitness my trainer gave to me...”
 - 12 jumping jacks
 - 11 raise the roofs
 - 10 knee lifts
 - 9 side stretches
 - 8 jogs in place
 - 7 toe raises
 - 6 kicks to the front
 - 5 hula hoops (imaginary hula hoop)
 - 4 jumping ropes (imaginary jump rope)
 - 3 muscle poses
 - 2 scissors
 - 1 stork stand (balance on one foot)

Red light, Green light

FORMATION: Form a straight line at one side of the open classroom

EQUIPMENT: None

RULES/DIRECTIONS:

1. Teacher/instructor calls out the initial first round calling out green, yellow and red.
 - Green: walk fast
 - Yellow: walk slowly
 - Red: stop
2. The first student to reach the opposite end of the classroom and high five the teacher's hand wins.
3. That student will then call the calls for the next game.

Name and Action game

FORMATION: Form a circle around perimeter of the room

EQUIPMENT: None

RULES/DIRECTIONS:

1. Have every student pick a PA movement or motion to go along with their name.
2. Student does their motion and then calls another students name.
3. New student does the previous students motion then their own and calls a new students name.
4. This will continue until all students have participated.

Appendix B

Interview Questions for Teachers and Organizations

- 1) What is the mission of this organization? What resources are offered?
- 2) What types of activities and methods do you use to teach your students?
- 3) How do you believe people in Samoa perceive special needs and has this perception evolved?
- 4) How aware do you feel most people here in Samoa are of the services AFM provides?
- 5) Do you work with outside resources/ organizations/or programs? If so what opportunities have they presented for the students in and out of the classroom?
- 6) What are goals you have for the future?
- 7) What are the challenges that are prevalent? How are they being addressed?

Appendix C

Interview Questions for Teachers Following the Implementation of in Class Energizers

1. Following the implementation of PA energizers do you find them to be beneficial in the classroom in bringing the students back on track and increase levels of participation?
Explain.
2. Do you think you will use any of these PA energizers in the classroom in the future?
3. Do you think movement in the classroom is crucial in this field?
4. Are there any goals you have for the future with the use of PA in the classroom setting?
And how can these be executed or achieved?
5. Is there any feedback you would like to give me on the PA energizers or the way in which they were executed?