

Obesity Prevention in Fairfield County, Ohio: Developing a Youth Health Awareness Leadership
Curriculum

Masters Project

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Kacie Funk

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The Ohio State University

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Project Committee

Dr. Caryn Filson, Advisor

Dr. Amanda Bowling

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Section 1: Introduction

Context of Problem

Obesity among children is a public health priority (Gibson et al., 2008). According to the National Health and Nutrition Examination Survey, it was estimated that fifteen percent of youth are overweight and nearly seventeen percent of youth are considered obese (Yip et al., 2015). These statistics identify an increase in childhood obesity from 6.1% to 17.4% within the past several years (Breslin et al., 2007). When examining data for youth aged two to five years old, statistics reported the rise in obesity from 5% to 13.9% of this population within the last 30 years (Breslin et al., 2007). Over 18% of the population of youth between ages six and eleven years old are reported to be obese. A child's obesity pattern is set around age eleven and a larger number of children are obese between the ages 6-19 years old, with 12–19-year-old youth having the largest increase (Anderson et al., 2019). According to the *Journal of American Preventative Medicine* (2011), when a child is overweight or obese, they are at a greater risk of having a low physical activity rate compared to their peers of normal body weight range. Obese youth are more likely to remain obese adults with increased risk of morbidity and mortality due to cardiovascular, metabolic diseases, and cancer (Weihrauch-Blüher & Wiegand, 2018).

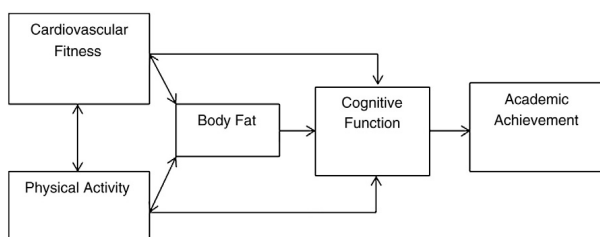
Parents of youth now expect their children to be physically worse off during their lifetime than they were (Gould & Voelker, 2012). One-third of male and female adolescents fail to meet the recommended standards for cardiorespiratory fitness (Donnelly & Lambourne, 2011). It is estimated that nearly 25% of children in the United States are overweight with a body mass index (BMI) in the 85th-95th percentile (Donnelly & Lambourne, 2011). These statistics

are alarming as children are presenting with adult diseases at an earlier age (Donnelly & Lambourne, 2011). Children who have an unhealthy body weight are at greater risk of developing type 2 diabetes, elevated blood pressure, increased triglycerides, and lower high density lipoprotein cholesterol levels (Paes et al., 2015); these comorbidities may also lead to heart disease. There are many factors impacting the rise in obesity among youth, including lower levels of physical activity, unhealthy food choices and increased sedentary behaviors (Fairclough, 2013). Over sixty percent of children who are overweight or obese have at least one additional risk factor that may contribute to heart disease, such as high cholesterol or high blood pressure (Breslin et al., 2007). Furthermore, overweight or obese children tend to have joint and bone problems, sleep apnea, endocrine abnormalities, social and psychological problems compared to their peers within a normal weight range (Breslin et al., 2007).

Although there are many factors that lead to childhood obesity, one consistent lifestyle factor among most children is the amount of time they spend in the school environment. Nearly 49.4 million students in grades prekindergarten through 12th grade are enrolled in public schools across the United States (National Center for Education Statistics [NCES], n.d.). In the past decade, it has been estimated that American children spend close to 15,000 hours of their most vulnerable years in a school setting (Karagianni & Jude Montgomery, 2017). These students typically spend between six to eight hours per day in an academic institution, thus, the American education system further promotes a sedentary lifestyle (Donnelly & Lambourne, 2011; Hills et al., 2015). Given the amount of time American students spend in a school setting, schools could be used as a catalyst to promote healthy lifestyles and to develop leadership skills for students to

enact healthy lifestyles outside the school setting (Donnelly & Lambourne, 2011). Providing students with these opportunities may increase physical activity levels and may promote the development of skills to make healthier decisions, leading toward overall healthier outcomes. Along with skills to make healthier decisions, students may have an increased ability to stay on task, comprehend academic lessons more clearly, reduce fidgeting, and have better concentration, especially when healthy lifestyle choices are paired with academic based physical activity (see Figure 1; Donnelly & Lambourne, 2011).

Figure 1.
Model of factors associated with improved academic achievement.



(Donnelly & Lambourne, 2011)

Physical activity is critical for maintaining a healthy body and mind. It is recommended that youth get at least 60 minutes of physical activity per day (Sacheck et al., 2021). However, half of children in the United States do not meet the recommendation for moderate to vigorous physical activity (MVPA), 30 minutes of activity during the day (Sacheck et al., 2021). When youth are physically active, they will decrease their chances of being overweight or obese, developing heart disease, developing diabetes, certain cancers, or weight related problems such

as sleep apnea (Goh et al., 2019).

Donnelly and Lambourne (2011) proposed that the classroom may be the ideal environment for combining physical activity and academic instruction together to provide life-long healthy outcomes for youth. The Comprehensive School Physical Activity Program also recommended providing more opportunities for physical activity during the school day and integrating physical activity into the classroom curriculum (Hills et al., 2015). The use of classroom based physical activity may promote more cognitive control in the classroom, leading to better classroom management and behavior management see figure 1 (Donnelly & Lambourne, 2011).

There is a need for physical activity to be implemented into the school day, either by an approved physical activity curriculum or through the teacher incorporating physical activity into their lessons (Donnelly & Lambourne, 2011; Hills et al., 2015). Utilizing student leadership to promote physical activity in the classroom may allow students to take ownership of the environment and allow them to transfer that learning beyond the classroom (Martiencek & Hellison, 2009).

Obesity prevention programs are research supported, effective ways to decrease the onset of obesity in youth, and schools may be an ideal place to implement them (Whittemore et al., 2013). School-based obesity prevention programs have shown greater than 75% improvement to students' knowledge, self-efficacy, and health behaviors including physical activity and nutrition (Whittemore et al., 2013). The earlier obesity prevention programs are implemented, the greater the impact on the wellbeing of childhood development and later stages of life (Pérez-Rodrigo & Aranceta, 2003).

Problem Statement

Statistics continue to provide evidence of the rising rates of obesity among children. American youth are expected to have more physical conditions and ailments than their parents because of decreased physical activity and poor health style choices. These factors have contributed to an increase in youth obesity rates and comorbidities, such as diabetes and heart disease (Weihrauch-Bluhner & Wiegand, 2018). With nearly 49.4 million American students enrolled in a traditional public school learning environment in kindergarten through twelfth grade, (NCES, n.d.), increasing physical activity and obesity prevention programs into a school day may reduce the onset of obesity and impact youth well-being into adulthood.

Fairfield County, Ohio is no exception to the alarming health statistics and obesity trends seen nationally. In a 2019 Community Health Information Plan (CHIP), obesity and lack of exercise were listed in the top three health and well-being concerns for Fairfield County residents, following healthcare costs and concerns of drug abuse. Nearly 13% of the county's population expressed concern over obesity and lack of exercise (Fairfield County Health Department [FCHD], 2019). This indicates that the community is aware of the rise of obesity among adults and youth and are uneasy about the statistics. With nearly 23,000 children enrolled in public and private schools across Fairfield County, (Fairfield County, 2022) there is an opportunity to promote healthy lifestyle choices through programming and curriculum to address the growing concerns of the community.

Statement of Purpose and Project Objectives

Levels of physical activity found in American public schools have been on the decline since the 1970's. During this time, the prevalence of overweight and obese children has nearly tripled (Donnelly & Lambourne, 2011). However, experts suggest that adding as few as six minutes per day to students' physical activity level can produce improvements to their academic and fitness level over time (Goh et al., 2019).

As youth battle health concerns with growing obesity rates, one way to address the critical issue is through youth obesity prevention programs and leadership opportunities that focus on promoting healthier lifestyles. Public schools can be an instrumental resource for delivering health education curriculum and leadership development that promote healthy lifestyle choices. Therefore, the purpose of this project was to promote physical activity and leadership among school-aged students in Fairfield County, Ohio through developing a Youth Health Awareness Leadership Curriculum to implement in local schools. The goal of the Youth Health Awareness Leadership Curriculum was to educate and empower youth to make positive health-related changes and model healthy behaviors that can lead to healthier lifestyles.

Therefore, the objectives guiding this project were to:

1. Develop a Youth Health Awareness Leadership Curriculum to teach grades K-5 how to model healthy behaviors.
2. To pilot test the Youth Health Awareness Leadership Curriculum for grades K-5 to model healthy behaviors.

3. Disseminate the Youth Health Awareness Leadership Curriculum for grades K-5 to model healthy behaviors to school administrators and decision makers.

Section 2: Review of Related Literature

The purpose of this project was to promote physical activity among school-aged students in Fairfield County, Ohio through developing a Youth Health Awareness Leadership Curriculum to implement in local schools. The goal of the Youth Health Awareness Leadership Curriculum was to educate and empower youth to make positive health-related changes and to model healthy behaviors that can lead to healthier lifestyles. To guide this process, a review of existing research and literature related to youth health and wellness, youth leadership, and existing educational curriculums related to youth leadership and youth health were explored.

Physical Activity in Youth

Although the benefits of physical activity are well documented, physical education (PE) and physical activity (PA) are declining among youth (Dinkle et al., 2017). One reason for the decline is that fewer schools in the United States provide daily PE or equivalent throughout the school day (Gibson et al., 2008; Dinkle et al., 2017). As a result, responsibility is placed upon teachers to incorporate PE into the classroom. This expectation for teachers can take time away from curriculum-based learning, which is already packed with core content and standards, leaving little availability for additional activities (Breslin et al., 2007). Historically, teachers could use their day teaching content, as PE and recess were part of daily schedules and provided the physical and brain-breaks students needed throughout the day. As schools reduce outlets for students to express physical movement, one way for teachers to incorporate more PA is to lead short bouts of activity between lessons (Goh et al., 2019). A survey conducted by the Center for Disease Control and Prevention examining physical activity

requirements found that 35 states did not require a physical break for middle school or high school students during the school day. Among the states that participated in the survey, Colorado was the only state that required classroom physical activity breaks for students (Center for Disease Control and Prevention, 2018). According to the National Guidance for Classroom Physical Activity, classroom activity should not replace recess or physical education (PE) classes yet should reinforce skills learned in PE. Furthermore, the Center for Disease Control and Prevention recommended that educators should not withhold classroom physical activity from a student.

When a student is engaged in physical activity during classroom instruction there are many benefits, including: increased daily physical activity levels, on task behavior, improved cognition, and improved academic performance (Dinkle et al., 2017; Goh et al., 2019;). Along with academic improvements, a student with increased physical activity either by PE, recess, or in the classroom, will be more likely to maintain their body weight (Gibson et al., 2008). Although there are benefits of incorporating physical activity in the classroom, it should be noted that there may be unwanted outcomes that should be acknowledged by teachers when adding physical activity during classroom instruction. For example, a child may experience side effects of being physically active, such as being sweaty, thirsty, having sore muscles, breathlessness, and increased heart rate (Breslin et al., 2007). However, overtime, these side effects will lessen, and the students will have an increased cardiorespiratory endurance (Goh et al., 2019).

Physical Education Curriculums

The Center for Disease Control defines classroom physical activity as any physical activity done in the classroom that takes place at any time, occurs in one or several brief periods, occurs at all school levels and is offered in addition to physical education classes and recess (n.d). When a teacher wants to incorporate physical activity into their classroom, finding the right resource or curriculum can be challenging. There are many websites that provide teachers with physical activity ideas, such as Go Noodle.com. *Go Noodle* is a website designed to increase physical activity in short bouts of time. The teacher only needs to know what and when to implement physical activity into their educational materials and how it will impact the students (Breslin et al., 2007; Dinkle et al., 2017).

Go Noodle is designed primarily for grades kindergarten through five to help teachers encourage students to physically move with short interactive activities (About Go Noodle, 2022). Activities in *Go Noodle* last between one minute to five minutes. *Go Noodle* activities focus on a healthy body and mind and engage students in attention gaining exercises and brain boosters (About Go Noodle, 2022). Within *Go Noodle*, teachers can create a classroom goal and enable students to watch their progress through a virtual mascot that grows as the class earns points (About Go Noodle, 2022).

Springboard to Active Learning is another program designed for students in kindergarten to fifth grade. Springboard is an established program that provides general tips for educators on implementing classroom physical activity to a wide range of students. For example, Springboard encourages the use of music, but also encourages teachers to be aware of the different physical

abilities in the classroom. Springboard uses adults to model healthy behaviors and to join the physical activity; it is also the adult who should be aware and noticed when a student is not participating in class (National Network of Public Institutes [NNPHI], 2018). Like Go Noodle, teachers can also utilize this program to enhance classroom physical activity. These lessons last one minute to five minutes in length and can be integrated into the academic lesson (NNPHI, 2018).

Fit4Kids is another program designed for kindergarten to fifth graders by the State of Virginia to enhance the health and lives of school age children. In this program, teachers utilize various links that correspond to the standard of learning in one or all of the following subjects: language arts, math, science, and social studies (Active lesson plans, 2022). Teachers click on the link that corresponds with their lesson for that day and the link will lead them to a resource to integrate classroom physical activity into their lesson. The link may include quick brain boosters or strategies to get students up and moving during the lesson. One example of Fit4Kids can be in math when students get the answer correct, students then perform an exercise based on the correct answer (Active lesson plans, 2022).

Although there are existing resources for teachers to utilize when implementing physical activity into their classrooms, teachers need to locate, analyze, and find where and how to incorporate lessons into their instruction. Each program has pros and cons and should be analyzed before making the decision to utilize it.

Youth Leadership

Youth leadership is both an internal and external process that enhances the ability to guide or direct others on a course of action, influence their opinion and behavior and show the way by going in advance, and the ability to analyze one's own strengths and weaknesses, set personal goals and vocational goals and have the self-esteem to carry them out" (Gill, 2005). Leadership is defined as "a process whereby an individual influences a group of individuals to achieve a common goal" (Gould & Voelker, 2012, p.38). Youth leadership is described as learning, listening, dreaming, and working together to unleash the potential of each person's time, talent, and treasure. (Redmond & Dolan, 2014).

According to the National Collaborative Workforce and Disability/Youth, five areas of development were identified to increase youth leadership (Gill, 2005). The five areas include:

- Working
- Learning
- Thriving
- Connecting
- Leading

Working refers to the development of positive attitudes, skills and behaviors around occupation and career directions. Outcomes from the working area are readiness skills and involvement in meaningful tasks. Examples of how to develop youth development for working include internships and career interest surveys.

Learning is the development of positive academic attitudes, skills, and behavior. Outcomes

in the learning area enable youth to develop rational patterns of solving problems and critical thinking. Some examples of ways to develop youth in learning include working in groups, problem solving games, and using academic skills to complete a project.

Thriving is the development of attitudes, skills and behaviors that are demonstrated by maintaining optimal physical and emotional well-being. Outcomes associated with when youth are thriving include the knowledge to practice good nutrition and hygiene, and to have the ability to identify risky conditions. Ways to help youth develop thriving skills include nutrition workshops, hygiene workshops, and role play situations.

Connecting is developing positive social behaviors and attitudes. Outcomes associated with this area of developing youth include building quality relationships, the ability to build trust, and the ability to have effective communication. Examples of ways to develop youth in this area include adult mentoring, positive peer interactions, and team building exercises.

Leading is the positive skill and behavior around civic involvement and personal goal setting. Outcomes associated with developing youth in this area include a sense of responsibility to oneself and the ability to articulate one's personal values. Examples of ways to promote development in this area include assuming leadership roles and participation in community projects.

Implementing leadership programs with youth helps to establish habits and patterns that are often seen in adulthood (Mortensen et al., 2014). These habits and patterns may promote more civic engagement and leadership in youth while they are young and produce a larger cadre of adults prepared to be leaders in society once they mature (Mortensen et al., 2014). When youth

are developing leadership skills it can be expected to take up to ten thousand hours of application to become proficient in a skill or area (Redmond & Dolan, 2014). Although the time commitment can be immense, introducing youth to leadership development provides them with the opportunities to foster needed skills in a meaningful and authentic way (Redmond & Dolan, 2014).

Developing leadership skills in youth improves multitude of areas in their growth: social and emotional intelligence, collaboration, articulation/communication, insight, and knowledge (Redmond & Dolan, 2014). Emotional intelligence includes the ability to have self-control and self-awareness. Emotional intelligence enables youth to realize when situations are not working and how to manage or problem solve appropriately. Another skill that youth leadership develops is collaboration. Collaboration enables teams to work well together, especially under different opinions (Redmond & Dolan, 2014). Articulation and communication are the ability to present a convincing argument which encourages others to support their cause.

Articulation is a key skill to enlist others to commitment to a vision (Redmond & Dolan, 2014). Self-awareness, relating to others and includes having confidence and the ability to collaborate, such as team building, conflict resolution, problem solving and decision making (Redmond & Dolan, 2014). Securing effective communication at an early age enable youth to overcome the challenges associated with public speaking and having confidence in themselves that their opinions matter and that they are a contribution to society. (Redmond & Dolan, 2014). The last skill is insight and knowledge. Knowledge is a core skill needed for leadership,

which includes being able to solve problems (Redmond & Dolan, 2014).

To prepare youth for positive development, environmental factors are important. Within environmental factors there are authentic opportunities to participate, as well as have access to a mentor for guidance (Redmond & Dolan, 2014). Mentors are important as they help youth overcome challenges associated with doubts and encourage youth to continue their journey (Redmond & Dolan, 2014).

Youth leadership should be action oriented; without action there can be no leadership. Action oriented can be achieved by mastering the concept, being persistent and reflecting on a motivating role model or being purposeful in actions (Redmond & Dolan, 2014). When youth motivate others, it is internal or external? Internal is a learned experience that will enhance a basic skill such as reading, whereas an external experience is a type of monetary reward, or a prize (Redmond & Dolan, 2014).

Developing leadership skills early in life may provide students and young adults with a multitude of skills, such as goal setting, problem solving, and decision making (Armour et al., 2013). Providing leadership development opportunities is like offering other youth programs; it provides intervention to youth who are facing challenges or who are already engaged in risky behavior, or it can be framed as a prevention strategy (MacNeil, 2006). Active engagement of youth leadership can create self-esteem, confidence and essential social and intellectual competencies and provide an important foundation for future civic involvement (MacNeil, 2006). Youth understand problems that their peers are facing and can act as a bridge between adults and youth to stop negative stereotypes and address relevant problems (Armour et al.,

2013). Youth can make significant contributions to their community; young people have perspectives and experience that adults do not have (MacNeil, 2006). For youth to become proficient in leadership skills, adults will need to learn to share the “power,” (MacNeil, 2006). When youth leadership is developed and practiced it can be defined as “the provision of experiences from highly structured to, quire formal that help young people (MacNeil, 2006).

Leadership development should reflect the developmental age and stage of students. Each student will have different perspectives and applications based on individual experiences and age development, which may vary even among those of the same age (Gould & Voelker, 2012). The school is the primary organization experience for youth (Karagianni & Jude Montgomery, 2017). It is at school where children can change their behavior and learn leadership skills (Dollahite et al., 1998). At school, students can begin to utilize and develop *The 7 Habits of Healthy Kids*; through this program students can begin to build leadership skills. The seven habits are:

1. Be Proactive- You are in charge
2. Begin with the End in Mind- Have a Plan
3. Put First Things First- Work first- Then Play
4. Think Win-Win- Everyone Can Win
5. Seek First to Understand, Than to be Understood- Listen Before you Talk
6. Synergize-Together is Better
7. Sharpen the Saw- Balance Feels Best

Each portion of *The 7 Habits to Healthy Kids* enables a student to take ownership of

themselves and make choices. Sharpen the Saw reminds students to take care of their body by eating right, exercising, and getting plenty of sleep. Sharpen the Saw encourages students to spend time with other people and to find meaningful ways to help other people.

Theoretical Framework

Related to youth learning and leadership development, there are numerous theories and approaches that support best practices. For this project, the Theory of Zone of Proximal Development (ZPD) was used as a lens to better guide the development of the Health Awareness Leadership Curriculum. The Zone of Proximal Development (see Figure 2), introduced by Soviet Psychologist and social constructivist Lev Vygotsky, is defined as “the distance between the actual development level, as determined by independent problem solving, and the level of potential development, as determined through problem solving under adult guidance, or in collaboration with more capable peers,” (McLeod, 2018, p.1). Summarized, this theory purports that development occurs with the assistance of a more knowledgeable other who guides the learner through the learning process. There are three stages within the Zone of Proximal Development (Cherry, 2021). The first stage is where the learner cannot accomplish a task without assistance. The skill or task at hand is above or beyond the skill level of the learner. The more knowledgeable others must assist in completing the task. The second stage occurs when the learner can accomplish a skill or task with minimal assistance or guidance from the more knowledgeable other. The third stage occurs when the learner can accomplish the skill or task without assistance; this is mastery of the skill or task alone (Cherry, 2021). The

term “proximal” infers that the learner is “close” to mastering a skill or task (McLeod, 2018).

The Theory of Zone of Proximal Development supports learning in the classroom through modeling and support of a more knowledgeable person who guides the learning process. Positive outcomes of utilizing ZPD include the learners feeling more valued as they gain independence in their learning. Learners may feel their creativity and thought processes are more accepted, and the learning environment may provide more meaningful feedback and instructions from the instructor/teacher that promote growth in the learner. The ZPD not only provides positive learning outcomes for the learners, but it can also benefit the educator. The educator may be more equipped to identify strengths and weaknesses of students, can provide additional time for students to engage in social interaction and social cognitive learning, and possibly discover different thought processes students might use (Northern Illinois Center for Innovative Learning [NICIL], 2012). When a student and educator are successful it benefits the broader learning environment. Implementing the Zone Proximal of Development promotes high quality instruction and emphasis on student/teacher relationships, which may motivate the students and teachers to perform at a higher standard.

The Zone of Proximal Development is closely related to the Theory of Scaffolding, introduced by Wood, Burner, and Ross (McLeod, 2018) Theory of Scaffolding (see Figure 3) is defined as a process “that enables a child or novice to solve a task or achieve a goal that would be beyond their unassisted efforts” (McLeod, 2018, p.2). The idea is for the instructor to demonstrate a task or behavior, the class performs the task or behavior, and lastly the individual performs the task or behavior (NICIL, 2012). The use of scaffolding provides the educator, or

more competent individual, to support the student through learning activities that build or scaffold their abilities based on their previous knowledge and skills. Support from the educator or more competent individual is tapered off as students begin to master the skill on their own (McLeod, 2018).

When utilizing the Theory of Scaffolding, the instructor needs to consider the previous knowledge, skills, and background of the learners and offer a safe environment for learning, which in time, will promote a less dependent learner (NICIL, 2012). A few of the benefits of scaffolding content include it challenges students into deeper learning, engages students in meaningful and helpful discussions, and motivates learners to become better students. Two of the biggest benefits of scaffolding content in the classroom is that it allows students to gain a greater chance of meeting learning objectives and afford the opportunity for peer teaching, which may increase confidence for leadership.

There are many methods and techniques to introduce scaffolding into the classroom. According to The Center for Innovative Teaching and Learning at the University of Illinois, there are several approaches to scaffolding. Such methods would include utilizing a rubric or providing concept maps to engage the learner and begin to allow them to learn independently. Another method may be to offer real life objects to manipulate and study to promote self-learning through investigation. Another method could be utilizing the body as cues such as using an “outdoor voice,” when talking to a large crowd to offering visual cues when one is ready. These methods provide the learner with a guiding hand while helping them to independently

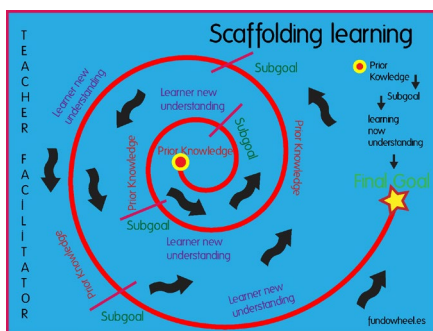
learn. The use of these teaching tools allow educators to introduce content to students and then gradually build the depth of content as students increase their understanding.

Figure 2: Zone of Proximal Development



(What is the zone of proximal development, 2022)

Figure 3: Theory of Scaffolding



(Scaffolding, 2016)

The Youth Health Awareness Leadership Curriculum utilizes the Zone of Proximal Development by allowing students to acquire skills needed to be an effective leader by working alongside a more knowledgeable adult who models the skills and behaviors. The primary goal of this program is for students to increase physical activity throughout a school day and transfer those skills into lifestyle choices outside of school. The curriculum instruction is led by a more knowledgeable adult who scaffolds the content and teaches the students the skills to increase their physical activity, while using subgoals throughout the process to build appropriate building blocks (Scaffolding, 2016). The objective of the Youth Health Awareness Leadership Curriculum is that by the completion of the program, students will have the skills and knowledge to implement physical activity on their own, without the assistance of the teacher (see figure 4).

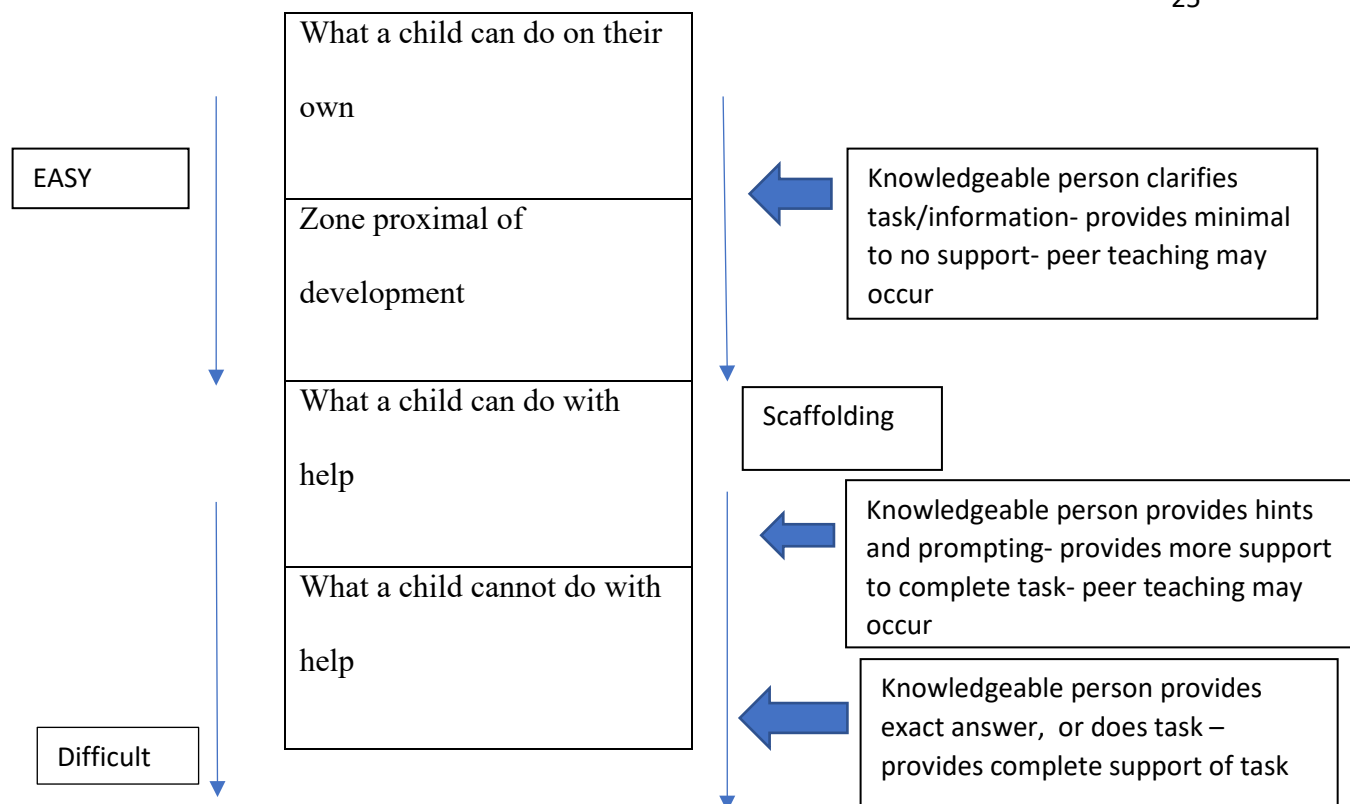


Figure 4 Integrating ZPD and Scaffolding into Health Awareness Leadership Curriculum

Section 3: Methods

Adjusted purpose based on Covid-19

Covid-19 impacted the timeline for implementation of the Youth Health Awareness Leadership Curriculum at Mount Pleasant Elementary. It was intended to implement the curriculum for grades kindergarten through fifth. However, because of on-going limitations and restrictions in schools during the implementation of the pilot curriculum, not all grades kindergarten through fifth were available to pilot test the curriculum during the 2021-2022 school year. Therefore, the curriculum was developed for all students, in all grade bands (K-1, 2-3, 4-5), but the curriculum was only pilot tested to selected students in the fourth-fifth grade band. The curriculum was offered as a 45-minute program, once a month instead of once a week, during January, February, March, April, and May .

The purpose of this project was to promote physical activity and leadership among school-aged students in Fairfield County, Ohio through developing a Youth Health Awareness Leadership Curriculum to implement in local schools. The goal of the Youth Health Awareness Leadership Curriculum was to educate and empower youth to make positive health-related decisions and model healthy behaviors that can lead to healthier lifestyles. Therefore, the objectives guiding this project were adjusted due to Covid-19 impact:

1. Develop a Youth Health Awareness Leadership Curriculum to teach grades K-5 how to model healthy behaviors.
2. To pilot test the Youth Health Awareness Leadership Curriculum for grades 4-5 to model healthy behaviors.

3. Disseminate the Youth Health Awareness leadership Curriculum for grades 4-5 to model healthy behaviors to school administrators and decision makers.

Population

To meet the goals and objectives of this project, a collaboration with Mount Pleasant Elementary, a local school in the Lancaster City School District in Fairfield County, Ohio, was established. Mount Pleasant Elementary serves over 500 students in grades kindergarten through fifth grade in the southeastern part of the county. Nearly three-fourths of the student population live within walking distance to school in the city of Lancaster, Ohio (Burke, 2022). During the time of this project (2021-2022 school year), Mount Pleasant Elementary students were identified as 47% females and 53% males; 63% of the students were on a free or reduced lunch program (Ohio Department of Education, 2019). Mount Pleasant Elementary is one of five elementary schools in the Lancaster City School District. In 2017, Mount Pleasant teachers and administrators implemented a “whole school transformation model of learning” to introduce leadership among youth called The Leader in Me, The 7 Healthy Habits of Highly Effective People by Steven Covey (Burke, 2022). This project was implemented through the collaboration with The Ohio State University Extension SNAP Ed program and Mount Pleasant Elementary to implement a health awareness leadership program to increase leadership by utilizing physical activity during the school day. This collaboration aligned with the 2017 goal of introducing youth leadership schoolwide.

Establishing a Collaboration

In 2019, the Fairfield Health Department began their Community Health Assessment (CHA). The CHA is completed every three years to assess the needs of a particular county in Ohio. The CHA is administered by the local Health Department. The primary objective of the CHA is to assess various needs of the community and to explore ways to implement changes to enhance the community. The 2019 CHA identified obesity as one of the top concerns of Fairfield County residents, only behind mental health, and substance abuse (see appendix A). In 2019, the CHA committee began to evaluate how to make a positive impact on the residents in Fairfield County. The committee decided to invite The OSU Extension SNAP Ed program to join the CHA team.

In February 2020, the CHA committee identified best practices to help decrease obesity by increasing physical activity among county residents. Upon identifying best practices, the CHA was now considered the Community Health Improvement Plan (CHIP). The CHIP identifies the main areas of concern within the county and guides the development of goals and objectives. The CHIP became a working document that guided all efforts set forth to increase physical activity among youth in the county. Within the document, OSU Extension Fairfield County SNAP Ed was charged with establishing partnerships with local elementary schools that had established nutrition education programs. The goal of CHIP was to begin a school wellness program in June 2020 and to finalize a pilot of the program by December of 2022 (Appendix B).

After the February 2020 CHIP meeting, Covid-19 began making an impact around the world. In March 2020, Covid-19 caused a statewide shutdown and forced the CHIP to be placed on hold. After several months of being paused, the CHIP was reconvened by utilizing the Zoom platform. Several months went by and no work was completed because of Covid-19; this pause in the program is indicated on the CHIP records. After nearly a year and half, The OSU Extension SNAP Ed program was able to begin programming in schools again in mid-2021.

To begin working on the CHIP there was a need to reach out to a local elementary school. Mount Pleasant was identified as the initial school to begin programming due to its established connections with OSU Extension and its 2017 goals for establishing youth leadership. Mount Pleasant Elementary is one of five elementary schools in Fairfield County that qualify for the SNAP Ed program through the USDA free and reduced lunch program. Already having a working relationship with Mount Pleasant Elementary through nutrition education classes and implementing a Policy, Systems and Environmental Changes (PSE) in previous years, the project coordinator had an existing relationship to discuss piloting the Youth Health Awareness Leadership Curriculum with the principal of the school. Initial contact with the principal occurred on April 6, 2021 and was primarily through emails; a face-to-face meeting for planning and coordinating logistics occurred three times prior to starting the project. Through these initial planning conversations, the principal shared that Mount Pleasant was going to start a leadership program designed for K-5th graders and the Youth Health Awareness Leadership Curriculum would be a powerful addition to the program. The program was approved, and the project coordinator began planning.

Writing Objectives

After the idea for implementing the Youth Health Awareness Leadership Curriculum was approved, the project coordinator started the process for developing the curriculum. The curriculum was developed to reflect the needs of elementary aged students and the Fairfield County community. The curriculum also focused on leadership, focusing on the developmental age and stages of students understanding that each student brings different perspectives and individual experiences to the group, and it can vary among those of the same age (Gould & Voelker, 2012). To begin, age-appropriate learning objectives were established. The objectives were categorized into three grade bands: kindergarten and first grade; second and third grade; and fourth and fifth grade. The grade bands allowed a more manageable number of objectives and lessons needed to establish the curriculum. The objectives for each grade band were aligned with developmentally appropriate content and reflected state learning standard and Mount Pleasant Elementary's leadership initiative. However, the overarching program outcomes for all grades remained the same: to increase physical activity within the school day by utilizing student leadership to teach and model healthy behaviors.

The project coordinator initially created 14 objectives for kindergarten and first grade; 18 objectives for second and third grade; and 22 objectives for fourth and fifth grade. These objectives were reviewed by a panel of educational professionals to determine the age appropriateness and relevance of each objective. The panel of professionals included a licensed second grade teacher employed in an Indiana public school, a SNAP Ed Program Assistant in

Fairfield County, and a faculty member in higher education who prepares preservice teachers. Each educational professional on the panel received the initial draft of objectives by email or hard copy. The licensed elementary teacher evaluated the objectives specifically for content and age-appropriate language for each grade band. The SNAP Ed Program Assistant evaluated the objectives to ensure they aligned to the SNAP Ed program in Fairfield County's demographics and to ensure verbiage included key phrases and age-appropriate activities. The faculty member in higher education evaluated all the objectives for clarity, grammar, and accuracy.

Edits made to the objectives reflected the feedback from the panel. Feedback from the panel included decreasing the number of objectives for kindergarten and first graders to include only one objective per lesson and utilizing verbs for the objectives to ensure both student action and measurability. For example, initially kindergarten had three objectives for each lesson. After evaluating the objectives, the panel of experts suggested that kindergarten children can successfully complete one to two objectives in the allotted time of 45 minutes.

All objectives that reflect the panel's feedback for kindergarten through fifth grade can be found in Appendix C. The established learning objectives were the guiding focus for designing the Youth Health Awareness Leadership Curriculum. Once each grade band had all the objectives finalized for the intended length of the program, nine weeks, it was time to write the curriculum. For example, an objective during the first lesson of 4th and 5th, the student leaders will be able to identify five characteristics of a positive leader.

Curriculum Development

The curriculum was organized into nine sections that related to physical activity and the importance of taking care of the body, such as importance of building endurance, calming with the breath, flexibility, and building the various muscles in the body. Utilizing the established learning objectives, the project coordinator developed nine lesson plans for grades K-1, nine lesson plans for grades 2-3, and nine lesson plans for grades 4-5. Each lesson plan focused on one or two objectives per lesson and was developed to last 45 minutes. Each lesson plan incorporated learning activities that reflected the Zone of Proximal Development and Theory of Scaffolding. Leadership development practices were incorporated into each lesson to promote youth leadership. For example, during lesson one of each grade band students learned what the *7 Habit for Healthy Kids* were and how they will learn how to Sharpen the Saw by keeping their body healthy. An example of a specific leadership outcome was during lesson two. Instead of the adult organizing the students into speaking parts, the student took ownership and began to organize the students, utilizing the Begin With the End in Mind for the *7 Habits of Healthy Kids*. Each lesson plan and content was to be taught by the more knowledgeable other (program coordinator or teacher) to the students. Students would then apply the content under the guidance of the program coordinator or teacher until they developed the skills to apply the content on their own. Those students were then provided the opportunity to teach other students the content. This allowed the students the opportunity to become action-oriented leaders as they were mastering the concept, reflecting on a motivation role model and being purposeful in their actions (Redmond & Dolan, 2014). Example lesson topics included: How to Increase Your

Cardio, The Importance of Calming the Body, and Utilizing the Breath. A sample lesson plan can be found in Appendix C. *Go Noodle* was incorporated into various lessons to provide a visual of the activity being discussed. For instance, during the week that the breath is discussed a Go Noodle video was shared that allowed the students to take a moment and work on their breathing prior to the lesson.

Piloting the Curriculum

As part of Mount Pleasant's 2017 youth leadership initiative, students in the school had the opportunity to participate in some type of leadership development activity. During the 2021-2022 school year, all students in grades four and five chose which leadership group they wanted to join by selecting from numerous clubs on a Google form distributed by the school. There were ten fourth and fifth grade male students at Mount Pleasant who choose to participate in the Youth Health Awareness Leadership Curriculum and were instructed on specific physical activity topics once a month for 45 minutes during January, February, March, April, and May. Each monthly lesson was held in the afternoon from 2:00-2:45 pm in a traditional elementary classroom. The monthly meetings were facilitated by the program coordinator who is also a SNAP Ed program assistant, while the classroom teacher oversaw the group and managed classroom behavior accordingly.

Applying the Zone of Proximal Development and the Theory of Scaffolding, the ten students gathered as a group with a more knowledgeable adult (program coordinator) during each monthly meeting. The monthly meetings were not only focused on health awareness and

promoting healthy lifestyle choices, but they were also used to develop the ten students to become student leaders who would share the information and teach peers the content learned during their meetings.

Dissemination

To establish the expectations of leadership among the ten students, conversation about leadership and what a leader looks like was an important foundation in the first lesson. As part of the lesson design to incorporate leadership development throughout the following months, the ten students were taught how to demonstrate the health knowledge and physical activities learned during their meeting times through the introduction of short videos. The ten leaders were informed they would create short videos at the completion of each session; the videos would include content that was learned during their meetings, as well as demonstrate physical movements. The leaders were told that their videos would be shown to the entire student body at Mount Pleasant to encourage participation and increase school wide physical activity.

Each monthly lesson was organized into small tasks to keep the attention of the intended audience (fourth and fifth graders). The first five minutes of each lesson contained a physical activity chosen at random by a volunteer student. The ten students participated in the physical activity to allow their minds to unwind and to be more focused on learning, as well as engage them in physical movement for health benefits. The physical activities included: stretching, jumping jacks, pushups, and running in place. Following the five-minute physical activity, the next twenty minutes focused on delivering the content of the lesson and meeting the identified

learning objectives. The final twenty minutes of each session were used to allow the ten students to create their video, which promoted application of the content and allowed them to demonstrate their leadership skills. The video activity also allowed the ten leaders to promote physical activity to the entire student body; the videos were shown the following morning during morning announcement on the classroom televisions to encourage the school population to engage in physical movement. Creating the video was the concluding activity summative assessment at the end of each monthly lesson.

Incentives

Throughout the months, the ten leaders were provided an incentive for their work in the Youth Health Awareness Curriculum Program. Incentives included fruit and vegetable pens and stickers. The incentives were dependent on funding from a local church ministry. As part of the curriculum, the final lesson was designed to offer the student leaders an opportunity to prepare a healthy smoothie using physical activity. The ten student leaders were able to ride a smoothie bike provided by The Ohio State University Extension Family and Consumer Science. Peddling provided the power to blend the ingredients for each smoothie. The ten leaders were able to enjoy a healthy fruit smoothie while being physically active.

Section 4: Impact, Feedback, Recommendations, Future Plans, Conclusions

Engagement

Upon completion of the Youth Health Awareness Curriculum at Mount Pleasant Elementary, ten fourth and fifth grade males were directly engaged through their participation as student leaders in the program; six of the students were fourth graders and four of the students were fifth graders. Through the video activity at the end of each lesson, the ten student leaders were able to engage nearly 500 students in grades K-5 at Mount Pleasant Elementary. The nearly 500 students at Mount Pleasant during this time included: four kindergarten classrooms, four first grade classrooms, four second grade classrooms, four third grade classrooms, four fourth grade classrooms, and four fifth grade classrooms. In total, twenty-four classrooms and twenty-four teachers were engaged by the videos throughout this curriculum.

Observed Outcomes

Physical Skills

Through the process of making videos, the ten student leaders became the more knowledgeable others (MKO) who scaffolded learning to their peers and encouraged their peers to increase physical activity levels. As the curriculum progressed, the ten student leaders became less dependent on the program coordinator and gradually needed less assistance in creating the videos.

Leadership Skills

During the later months, the ten leaders became more aware of their leadership strengths and took ownership of their roles to create the videos. At the start of the program, the ten leaders were provided prewritten material to create the videos, but toward the end of the program the leaders were encouraged to use their own words and understanding of the topics. Developing leadership skills early in life may provide students with a multitude of skills such as goal setting, problem solving and decision making (Armour et al.,2013).

Feedback

Upon conclusion of the Youth Health Awareness Curriculum, Mount Pleasant's principal provided feedback through a series of questions asked through email regarding the pilot run of the program. For example, "What are your recommendations to improve the program, and what went well?" Feedback included the perception that the program was well organized for the students. The principal provided positive feedback on the use of incentives for student leaders and that the program empowered the ten student leaders to speak in front of peers through the video activity. The principal perceived that the student-developed videos were well received across all grade levels in the school. The principal suggested more intentional follow up to ensure students are extending their knowledge beyond the classrooms and onto the playground. The principal shared that the leadership club was a valuable piece likely to empower youth to become leaders of today and tomorrow. During the follow up with the principal, it was confirmed that the leadership program will be offered again, and the principal invited OSU

Extension SNAP Ed to offer the Youth Health Awareness Leadership Curriculum in the upcoming academic year.

Much of the provided feedback was related to the video portion of the curriculum. Feedback from teachers indicated that the leadership club kept the ten student leaders involved by allowing them to take ownership and create the videos to be shared on the morning announcements. An example of leadership development demonstrated by students while creating the videos was indicated by the teacher present in the room. He shared that the students demonstrated many of *The 7 Habits for Healthy Kids* while creating the videos, focusing on *Sharpen the Saw* habits, by being physically active and *Begin With the End in Mind* habits, where the students had to plan how they would present the video. Both the principal and teachers agreed the leadership content and video content were age appropriate and helped all students to learn in a fun and engaging environment by incorporating *The 7 Habits of Healthy Kids*. Feedback from the student leaders indicated that it was perceived the student leaders felt like leaders because their videos were shown to the entire school community. From *The 7 Habits of Healthy Kids*, *Put First Things First* habit, was demonstrated by creating and organizing each other into roles for the video creation. This included identifying who would do the speaking parts and who would do activities during the video to provide the best video outcome possible. Through creating the videos, the student leaders felt ownership and other students would comment about the health awareness group and how they were “jealous that everyone saw their group on the morning announcements.” This comment suggests that the other students value what the student leaders demonstrated or Synergize, Together is Better. One teacher noted that

the student leaders commented that they would have liked to have the health awareness leadership club more frequently because it was fun and reminded them to make healthy choices for a healthy body and Sharpen the Saw. The principal and a teacher reported that the health awareness leadership program is something they would like to continue. When the student leaders worked in groups to create the videos, they were engaged in one of the five areas of development for youth: learning. Learning involves youth development when youth learn to work collaboratively in groups to develop rational patterns of problem solving and critical thinking (Gill, 2005).

Recommendations

During the 2021-2022 school year, Mount Pleasant Elementary School in Lancaster, Ohio piloted multiple leadership clubs; the Youth Health Awareness Leadership Curriculum was the foundation for one of the leadership clubs offered during this time. There were positive comments shared by students, administrators, and teachers upon implementing the curriculum through the pilot run. However, there were several recommendations made to improve the program in the future. It is recommended that the Health Awareness Program coordinator works to engage more female students to diversify the group to allow for a female presence among the student leaders. When having a diverse group of student leaders one of the five ways to increase youth leadership are being identified, connecting. Connecting is the ability to build trust, positive social behaviors, and attitudes (Gill, 2005). When a student identifies and trust another peer, they may be more inclined to participate in an activity. Another recommendation for the Youth Health Awareness Leadership Curriculum is to incorporate recess as part of the curriculum since this is

a time when students are typically most active during the school day. By including recess as a component of the curriculum, a student is integrating physical activity both in the classroom and outside the classroom, which increases their movement in an authentic environment of play. The more a student increases their physical movement, the more likely they are to maintain a healthier body weight (Gibson et al., 2008). Furthermore, by intentionally integrating recess into the curriculum, the student leaders from the leadership group could serve as the more knowledgeable other during recess and serve as role models to peers around them to become more active. It is recommended to offer the Youth Health Awareness Leadership club more often than once per month. When students are engaged with content more regularly, they continue to strengthen synapses in their brains through repetition. Through repetition, an activity becomes more automatic or an unconscious habit; thus, more frequent engagement with the health curriculum could lead to long-term healthy habits and decrease the risk of an unhealthy weight, cardiovascular disease, cancer, and death. The use of repetition aligns with the Zone Proximal Development Theory, demonstrating how frequent interactions support youth in developing skills which gradually lead to less need for support and the ability to become independent thinkers and problem solvers (McLeod, 2018). It is recommended that the Physical Education (PE) teacher becomes involved in the leadership group to assist in reenforcing the importance of increasing physical activity during the day. In doing so allowing the leadership students to take ownership in PE class to assist the PE teacher with PE lessons to incorporate the objectives taught in the Health Awareness Curriculum.

Other recommendations for the Youth Health Awareness Curriculum are relative to the video portion of the program. It is recommended that during the video portion of the lesson that the student leaders create the video as though they are in the room interacting directly with their peers. Changing this approach to video delivery may engage the audience more directly and encourage the students to get up and move along with the student leaders while the video is being played to the general student population. It is also recommended that the videos get played each day of the week during morning announcements. Daily interaction with the video would promote more physical activity among students during the week. Health professionals recommend that youth get 60 minutes of physical activity per day; each video would provide a minimum of five minutes of physical activity per day for all students in the school (Sacheck et al., 2021). After the completion of the nine-week program, it is recommended that video announcements with physical activity be continued to extend the outcomes of the program and to continue to promote healthy habits among the student population. Additionally, it is recommended that an adult, such as a teacher, initially assist students with creating the videos and then utilize the experienced student leaders to take ownership and lead the activities. In addition to the adult assisting with videos, it is recommended that teachers are engaged in the physical activities along with students. Utilizing this process would further promote one of the five areas of youth development: connections. Connections is where a student learns positive social behaviors and attitudes through adult mentoring and role modeling (Gill, 2015). Furthermore, it is recommended that the student leaders choose which activities to offer each week and begin to scaffold the activities to challenge themselves and their peers physically. The

last recommendation related to the videos is the video production. Throughout the pilot program, the program coordinator was responsible for assisting the student leaders while they recorded the videos to be shared with the general population of students. It is recommended that the student leaders become trained to video record, as another opportunity to demonstrate leadership and take ownership in the program. When the program coordinator (or other adult) trains the student leaders to record the video, the activity further demonstrates scaffolding, “enabling a child or novice to solve a task or achieve a goal that would be beyond their unassisted efforts” (McLeod, 2018). The more knowledgeable other, program coordinator or teacher, slowly withdraws from the task as students become more confident and skilled in their ability to record the video. As supported by research, when a more knowledgeable other works with a less knowledgeable other they slowly teach the less knowledgeable other to become more independent (McLeod, 2018); this transition of responsibility provides more opportunity for leadership among the student leaders.

Youth are often motivated through external factors, such as rewards and materialistic items. However, youth are also internally motivated when they enjoy an activity or see progress. When motivated, either externally or internally, a behavior is more likely to occur. Therefore, it is recommended to motivate youth to engage in the health program and physical activity. To motivate students intrinsically, it is recommended that student leaders choose the activities they enjoy and that they think their peers would enjoy. To motivate students extrinsically, it is recommended that an incentive program be used to encourage students to engage with the Youth Health Awareness Program. One recommended incentive that could incorporate both external

and intrinsic factors is to allow all students in each grade to have a smoothie bike party. A smoothie bike is a stationary bike that when pedaled, generates energy to blend ingredients into a smoothie. The smoothie bike is a popular activity among students and school groups; it could be used to encourage students to increase their physical activity or even compete with other classes to earn the opportunity for the bike to come to their classroom, while having fun participating in group activity. Another suggested incentive to motivate students is for the principal or administration to encourage physical activity by displaying a large grade level chart in the gymnasium or front lobby indicating which grade is leading the school in the number physical activity minutes during the school day. Adding the chart would target two of the five areas of youth development: working and thriving. Working is when the students work together to reach a common goal based upon the positive attitudes and skills of others (Gill, 2015). Thriving is the act of increasing physical activity during the school day is supporting the physical and emotional well-being of students (Gill, 2015). The parent teacher organization could get involved to encourage parents and guardians to extend the program at home and possibly provide funding for incentives, such as day passes to a local zoo, classroom field trips to a local park, jump ropes, step counters, even a T-shirt that demonstrates the student being a health leader. When the larger school community becomes involved in the program, there is more role modeling for students and reinforcement of learned behaviors outside the classroom.

Another recommendation for implementing the Youth Health Awareness Curriculum would be to collect pre and post knowledge of health awareness from the student leaders and the general population of students. Collecting pre and post knowledge would allow the program

director to measure changes in knowledge levels and collect feedback from students to improve the outcomes of the program. Collecting this information would allow the program director to modify curriculum to meet the needs and interests of students.

The delivery of content during the pilot program worked well and students were actively engaged during the lessons. Virtual delivery could be feasible if desired. Virtual delivery could be done through platforms such as PowerPoint with embedded videos or Zoom. It should be noted that if offering a virtual option, it could require more guidance from an adult, who may need to assist the students to navigate additional technology needs to distribute the program virtually.

Future Plans

To continue with the 2017 initiative to promote leadership at Mount Pleasant Elementary School, the principal has decided to continue implementing the leadership clubs for all students in grades kindergarten through fifth for the 2022-2023 academic year. The timeline to implement the leadership clubs into the 2022-2023 school year is dependent on staffing. The principal would like to have the programs implemented no later than January 2023. The Youth Health Awareness Curriculum will be included as one of the leadership club options for students. The program director for the Youth Health Awareness Curriculum has considered feedback from the 2021-2022 pilot year to enhance the program for the upcoming year. First, the school is planning to offer the Youth Health Awareness Curriculum to all students in grades K through 5. Since Covid-19 restrictions have been mostly lifted, there are more opportunities to engage with students in all grade levels. This will allow younger students and older students to choose the

Youth Health Awareness club as their opportunity to develop leadership skills. To better promote leadership among the older students, it is recommended to pair the younger grades (kindergarten and first grade) with the older grades (fourth and fifth) to engage in the curriculum and create the morning announcement video to share with the school. This will enable older students to serve as the more knowledgeable other and support the younger students while they scaffold their understanding and application of the content. In offering the program to the entire school body it is anticipated that there will be greater engagement among all students, and as recommended by research, school age students who engage in at least sixty minutes of physical activity per day can increase their on-task behavior, reduce fidgeting, and comprehend academic lessons more clearly (Donnelly & Lamburne, 2011).

The Fairfield County Health Department's long-term goal is to extend the Youth Health Awareness Curriculum to other SNAP Ed eligible schools within Fairfield County; this would include an additional five elementary schools. The opportunity to involve all grade levels at multiple schools for the 2022-2023 school year is a critical piece to increasing physical activity among Fairfield County youth, while promoting youth leadership among students who choose to become leaders in the club.

A suggested approach to extend the program in each school is through an after-school program. When incorporating the Youth Health Awareness leadership club into an after-school program there could be smaller groups of students, allowing more opportunities for leadership development among the groups. Developing leadership skills in youth improves a multitude of

areas in their growth, social and emotional, collaboration, articulation/communication, insight, and knowledge (Redmond & Dolan, 2014). More time is allotted in an after-school setting to build self-confidence, self-esteem, learn self-control, and teamwork. The MKO can utilize Scaffolding and Zone of Proximal Development to further support leadership skills while, allowing older or more knowledgeable students the opportunity to serve as action leaders who promote physical activity and healthy choices to younger students and less knowledgeable peers. An after-school program could also allow for more flexibility with timing to implement program lessons and activities. For example, instruction of material could be on a specific day of the week, then the following day the students could spend their time creating a video. Videos could still be shared on morning announcements at the site of the after-school program.

Conclusion

Research continues to report that levels of physical activity found in American public schools have been on the decline since the 1970's. During this time, the prevalence of overweight and obese children has nearly tripled (Donnelly & Lambourne, 2011). However, experts suggest that adding as few as six minutes per day to students' physical activity level can produce improvements to their academic and fitness level overtime (Goh et al., 2019). The Youth Health Awareness Curriculum implemented in local elementary schools was one approach to addressing childhood obesity in Fairfield County, Ohio.

Donnelly and Lambourne (2011) proposed that the classroom may be the ideal environment for combining physical activity and academic instruction together to provide life-long healthy

outcomes for youth. The Comprehensive School Physical Activity Program also recommended providing more opportunities for physical activity during the school day and integrating physical activity into the classroom curriculum (Hills et al., 2015). The use of classroom based physical activity may promote more cognitive control in the classroom, leading to better classroom management and behavior management (Donnelly & Lambourne, 2011). There is a need for physical activity to be implemented into the school day, either by an approved physical activity curriculum or through the teacher incorporating physical activity into their lessons (Donnelly & Lambourne, 2011; Hills et al., 2015). Utilizing student leadership through programs like the health awareness club to promote physical activity in the classroom may allow students to take ownership of the environment and allow them to transfer that learning beyond the classroom (Martiencek & Hellison, 2009). Providing leadership opportunities is just like offering other youth programs, it provides intervention to youth who may be facing challenges or who are already engaged in risky behavior (MacNeil, 2006).

The Youth Health Awareness Curriculum is a steppingstone to promote physical activity among youth and to develop youth to be leaders in championing healthy habits. The objective of the curriculum was to promote physical activity among youth, which could lead to a reduced risk of adult morbidities, such as cardiovascular issues, metabolic diseases, cancer and even death. While this program is still in an infantile stage, the outcomes observed from the pilot show positive changes in youth mindset and behaviors. With continued support and feedback, the Youth Health Awareness Curriculum has the potential to impact countless youth in Fairfield County and beyond through small actions that lead to life changing results.

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Appendix A

Behavioral Risk Factors, continued

Healthy People 2020 Goal

How does Fairfield County match up with national objectives? As part of its *Healthy People 2020* initiative, the Department of Health and Human Services set a goal that the percent of adults who are obese would decrease to 30.5% by the year 2020. Currently, Fairfield County does not achieve this target.

% of adults who are obese

HP2020 target: 30.5%

Fairfield County: 36.5%

HP2020 Status: **X**
(not met)

Body Mass Index⁵

| | Fairfield County (n=523) |
|-----------------------------------|-----------------------------|
| Underweight (BMI < 18.5) | 1.7% |
| Normal weight (BMI = 18.5 - 24.9) | 28.2% |
| Overweight (BMI= 25 - 29.9) | 33.7% |
| Obese (BMI > 29.9) | 36.5% |

An important predictor of obesity relates to one's nutritional intake. Most Fairfield County adults report eating fruit (i.e., fresh, frozen, or canned fruit, but excluding fruit juice) at least once on a typical day, and nearly all report eating vegetables at least once on a typical day. The U.S. Department of Health recommends a daily serving of 2.5 cup-equivalents of vegetables and 2 cup-equivalents of fruit. While residents may eat fruits and vegetables, they may not be reaching the recommended amounts for optimal health benefits.

Nutrition⁵

| | Fairfield County (average n=535) | |
|-------------------|---------------------------------------|--|
| | Median # of times doing this daily | Percentage doing this at least once daily |
| Eating fruit | 1 | 76.9% |
| Eating vegetables | 2 | 92.3% |

Behavioral Risk Factors, continued

Another important predictor of obesity is the extent to which one exercises regularly; 76% of Fairfield County adults said they participated in some form of physical activity, such as running or walking for exercise, calisthenics, golf, gardening, or other activity for exercise, other than their regular job, in the month prior to the survey. Fairfield County adult residents engaged in physical activity 10 times (median) and they engaged in 4 hours of physical activity (median) in the month leading up to the survey. For comparison, the U.S. Department of Health recommends adults spend at least 2 and a half hours per week, about 10 hours a month, doing moderate-intensity aerobic activity.

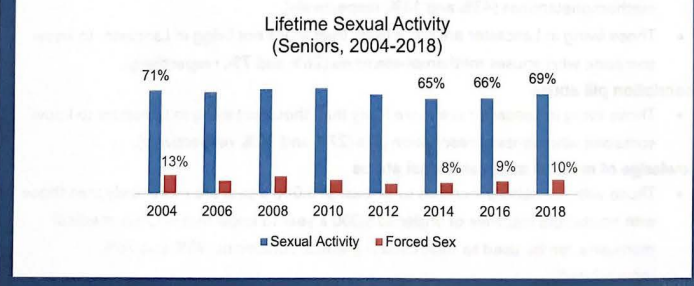
Physical Activity In Past Month⁶

| | Fairfield County (average n=525) |
|--|-------------------------------------|
| Times engaged in physical activity in past month (median) | 10 |
| Hours participated in physical activity in past month (median) | 4 |

Sexual activity is another behavioral risk factor that was measured among Fairfield County High School students, specifically seniors. The findings are presented below.

Findings from the 2018 Fairfield County Youth Behavior Survey

In this survey, 69% of seniors reported being sexually active in their lifetime, and 10% reported they felt forced into sexual activity in their lifetime.

Demographic Differences Observed In The 2019 Health Survey

Behavioral Risk Factors, continued

Overweight or obese

- Those 45 or older are more likely than those younger than 45 to be overweight or obese (77% and 61%, respectively).
- Males are more likely than females to be overweight or obese (81% and 60%, respectively).

At least one serving of fruit per day

- Those with a bachelor's degree or higher are more likely than those with less than a bachelor's degree to eat at least one serving of fruit on a typical day (95% and 71%, respectively).

At least one serving of vegetables per day

- Those with a bachelor's degree or higher are more likely than those with less than a bachelor's degree to eat at least one serving of vegetables on a typical day (100% and 90%, respectively).

Exercise

- Those with at least some college were more likely than those with a high school degree or less to have participated in physical activities or exercise in the month leading up to taking the survey (88% and 60%, respectively).
- Those with household incomes of at least \$50,000 a year are more likely than those with household incomes of under \$50,000 a year to have participated in physical activities or exercise in the month leading up to taking the survey (85% and 60%, respectively).

Prioritized Health Needs

This section lists Fairfield County's prioritized health needs, as identified by the community partners during their October 7, 2019 meeting. The significant health needs facing Fairfield County residents are Obesity, Substance Use/Addiction, and Mental Health, specifically Depression. These health needs are interrelated, if not co-occurring/co-morbid. For example, poor mental health can increase the risk of substance use behaviors, and weight problems can co-occur with depression.

Obesity, with its related categories of poor diet and lack of exercise, is the top priority for Fairfield County. Obesity can lead to a range of cardiovascular issues, including coronary artery disease which is the leading cause of mortality in Fairfield County. Obesity also increases risks of heart attack, stroke, and atrial flutter, which commonly occur among county residents.

| Priority #1: Obesity | |
|--|-----------|
| Key Indicators | See pages |
| Body mass index | • 31-32 |
| Diet and exercise | • 32-33 |
| Coronary artery disease and related heart issues (Mortality) | • 45 |

Substance use and addiction is the second highest priority health need. Continued use of alcohol, tobacco, or other drugs can lead to addiction and negative impacts on health, including COPD and cancer. Additionally, substance use in youth is associated with an increased chance of continued use and potential abuse later in life.

| Priority #2: Substance Use and Addiction | |
|--|-------------|
| Key Indicators | See pages |
| Tobacco and alcohol use | • 25-26 |
| COPD and cancer (mortality) | • 45,47 |
| Youth substance use | • 27, 30-31 |

The third highest priority for Fairfield County is mental health, specifically depression. Depression can lead to suicidal thoughts and behaviors. Victims of domestic violence, child abuse, and bullying may be at special risk to experience mental health issues.

Prioritized Health Needs

| Priority #3: Mental Health | |
|--|-----------|
| Key Indicators | See pages |
| Depressive disorder | • 38 |
| Rates of suicide and domestic violence | • 38 |
| Child abuse | • 39 |
| Self-harm behaviors and bullying (youth) | • 40-41 |

A preliminary list of community assets, resources, and partners that could possibly be mobilized and employed to address these health needs is presented in Appendix B.

During the prioritization session, several other health issues were considered significant enough to be considered in the final round of voting. In order of number of votes received, these other important health issues included:

- Cancer and cancer care
- Cardiopulmonary disease
- Income and poverty
- Access to care
- Alzheimer's disease and dementia
- Access to transportation.

Overall, Fairfield County's prioritized health issues align well with Ohio's 2017-2019 State Health Improvement Plan (SHIP). The SHIP identifies three priority health topics (or, general areas of focus) that communities should consider when planning to improve the population's health: mental health and addiction, chronic disease, and maternal and infant health, as shown below. The [Fairfield County 2019 Community Health Assessment](#) acknowledges chronic disease through the priority of obesity. Mental health and addiction is expressly prioritized in the [Fairfield County 2019 Community Health Assessment](#).

Health Priority Topics And Outcomes Identified By Ohio's 2017-2019 SHIP

| Mental Health and Addiction | Chronic Disease | Maternal and Infant Health |
|--------------------------------|-----------------|-------------------------------|
| Depression | Heart disease | Preterm births |
| Suicide | Diabetes | Low birth weight |
| Drug dependency / abuse | Child asthma | Infant mortality |
| Drug overdose deaths | | |

Appendix B

Fairfield County Community Health Improvement Plan (CHIP) Obesity Work Plan

Date: 4.21.2020

| Goal 2.2: increase physical activity rates across the lifespan | | | | |
|--|--|--|------------------------------------|---------------------------|
| Key Measure(s): Median times engaged in physical activity in the past 30 days: 10; Median hours participated in physical activity in the past 30 days: 4 (Source: 2019 Fairfield County Community Health Assessment) | | | | |
| Alignment with National Priorities: Healthy People 2020: PA-2 – Increase the proportion of adults who meet current Federal physical activity guidelines for aerobic physical activity and for muscle-strengthening activity | | | | |
| Alignment with SHIP: Chronic Disease Prevention | | | | |
| Objective(s) that address policy change(s) needed to accomplish goal: 2.2.2 | | | | |
| Objectives | Measure | Action Steps | Timeframe | Lead |
| Objective 2.2.1: By December 31, 2020, increase number of publicly available community physical activity events by 10%. | Baseline: TBD Target: Baseline + 10% | <ul style="list-style-type: none"> Create comprehensive list of events within the community to establish baseline Create plan to increase publicly available events Healthy Living Coalition leads efforts to organize events Consider new events at the library | Start: 6/1/2020 End: 12/31/2022 | Healthy Living Coalition |
| 2.2.2 – by December 31, 2022, implement school wellness program in at least 3 school buildings. | Baseline: 0 (2020 OSU Extension) Target: 3 | <ul style="list-style-type: none"> Identify school to pilot wellness programming in, extend into other school buildings once program is implemented successfully Meet with principle to discuss incorporating wellness programming into school day Principles implement policies to incorporate wellness programming into school day Partners: <ul style="list-style-type: none"> Extension Principles Physical Education Teachers | Start: 6/1/2020 End: 12/31/2022 | Kacie Funk, OSU Extension |

Appendix C

Motivators in Motion

Grades K and 1st

Overall Program objective: To increase students' physical activity throughout the school day.

Each teacher will be given a classroom chart. This chart will be used to keep track of the days the leadership group informs and leads the class in a physical activity break that was presented in the previous leadership group. At the end of the final weeks the classes that have shown they are committed to increasing physical activity by completing their physical activity goal, will have the opportunity to create their own smoothies using a smoothie bike.

The leadership students will receive incentives throughout the program when they demonstrate how they have encouraged their classmates to be more physically active. The classroom teacher will be given the chart to help keep track of how many times the students demonstrate physical activity utilizing the 4 weeks check off chart provided.

**LS=Leadership Students

| Grades K-1 st | Objective | Activity | Material | Incentives |
|-----------------------------|---|---|---|------------|
| Week 1 | 1.The leadership students (LS) will name 2 ways to be a healthy leader 2.Leadership students will determine the physical activity goal for the | With assistance from the group leader the students will create a goal for their group and work on how to talk in front of peers. Students will decide which | Handout describing program to parents Paper and pencil will be used to write down group goal. | None |

| | | | | |
|--------|---|--|---|------------------------|
| | classroom incentive. | leadership role to take, leader, organizer ,speaker, presenter, and evaluator. | | |
| Week 2 | 1.Leadership students will explain 3 benefits of physical activity 60 minutes per day. 2.LS will be able to log their classroom physical activity for accountability | Students will record their classroom activities for 1 week. Students will engage in a relay race to increase physical activity. | Video that discusses the importance of physical activity and handout to take home to record their activity. Video link: https://www.youtube.com/watch?v=lgz67GIIENs | Fruit or vegetable pen |
| Week 3 | 1.Studetns will actively participate while the LS demonstrate 3 simples yoga poses such as rag doll, butterfly, and child's pose to help increase flexibility. | Practice poses Ragdoll, Child Pose and Butterfly for classroom demonstration. The students will also play musical mat with the cards for Kids Yoga Challenge that are 1 or 2 star rated. | Yoga mats Kids Yoga Challenge Pose cards | None |
| Week 4 | 1.Students will actively participate while the LS demonstrate and explain 3 | Practice strength activities for classroom demonstration pushups, sit | pictures that highlight a variety of strength training. | None |

| | | | | |
|--------|--|---|--|------|
| | simple activities that build healthy muscles. | ups and calf raises. Students will determine the number of times the activities are performed in class. Students will play a game Simon says that reinforces strength activities. | | |
| Week 5 | 1.Students will actively participate while the LS demonstrate 3 activities to increase in time. 2.LS will share the importance of being able to perform physical activities for a longer amount of time | Corners: Divide kids up so that they each have a home corner. Then, have them run around the room in a circle. On your cue, they need to return to "home" and do a few easy exercises (say, five jumping jacks or 5 side to side jumps) LS will decide which activities to demonstrate. | Various pictures representing different activities to work on the ability to sustain activity level longer | None |

| | | | | |
|--------|--|---|---|--------------|
| Week 6 | <p>1.Students will actively participate while the LS demonstrate 3 activities that increase their heart rate.</p> <p>2.LS will share why it is important to increase their heart rate.</p> | <p>Students will perform the three activities of their choosing based on pictures and demonstrate to their classmates and play red light green light, incorporating activities that increase their heart rate such as, jogging, hopping, skipping</p> | <p>Various pictures representing activities that demonstrate ways to increase their heart rate.</p> | Jump rope |
| Week 7 | <p>1.Students will actively participate with the LS to track their water intake goal for accountability.</p> <p>2.The LS will share 3 ways water affects the body.</p> | <p>students will try infused water</p> | <p>short video clip on how water is beneficial for our body https://youtu.be/FGBbBP-QYE0 (Common Bytes Curriculum) ingredients for infused water, water challenge handout</p> | Water bottle |
| Week 8 | <p>1.Students will actively participate while the LS demonstrate 3 basic calming exercises to reduce stress</p> | <p>Practice three calming breath for classroom demonstration from :Breathing Exercises for Kids: Help Children</p> | <p>Breath cards, Breathing Exercises for Kids: Help Children Learn to calm and focus</p> | Stress ball |

| | | | | |
|--------|---|---|------|---------|
| | and calm the body. | Learn to calm and focus | | |
| Week 9 | 1.LS will be able to explain a variety of physical activities that are fun and encourages them to increase their activity level throughout the day. | As if- Minnesota Extension Energizer activity | None | T shirt |

Grades 2nd-3rd

Overall Program objective: To increase students' physical activity throughout the school day.

Each teacher will be given a classroom chart. This chart will be used to keep track of the days the leadership group informs and leads the class in a physical activity break that was presented in the previous leadership group. At the end of the final weeks the classes that have shown they are committed to increasing physical activity by completing their physical activity goal will have the opportunity to create their own smoothies using a smoothie bike.

The leadership students will receive incentives throughout the program when they demonstrate how they have encouraged their classmates to be more physically active.

The classroom teacher will be given the chart to help keep track of how many times the students demonstrate physical activity utilizing the 4 weeks check off chart provided.

LS= Leadership students

| 2nd & 3rd grade | Objective | Activity | Materials | Incentive |
|---------------------------------------|--|--|--|------------------|
| Week 1 | 1.Leadership students will recall the program goals . 2. LS will identify 3 characteristics and explain | With assistance from the group leader the students will create a goal for their group a personal go. | Information on what the health group is about for the leadership students to take home. Paper and pencil will be used to write down a personal goal | None |

| | | | | |
|--------|--|--|--|--------------------------------|
| | <p>what a good leader is.</p> <p>3. LS will identify a physical activity goal to earn the classroom incentive.</p> | <p>Students will work on how to talk in front of peers. This will enable the students to gain the confidence they need to speak to their classmates when doing the activities. Decide which role of leadership each student will take one, speaker, leader, organizer, presenter, and evaluator.</p> | | |
| Week 2 | <p>1. LS will explain the importance of getting 60 minutes of physical activity daily.</p> <p>2. Students will actively participate in maintaining an activity log for accountability with the LS.</p> | <p>Students will record the classroom activities for 1 week and share how their class did. it was hard to achieve physical activity.</p> | <p>Video that discusses the importance of physical activity and the activity log handout</p> <p>Video link:</p> <p>https://www.youtube.com/watch?v=0KIkwc0CTZk</p> | <p>Fruit or vegetable pen.</p> |

| | | | | |
|--------|---|--|--|-----------------------|
| Week 3 | 1. Students will actively participate while the LS demonstrate five simple yoga poses and explain the benefits of increasing flexibility. | Students will choose five yoga poses to teach their classmates then play Freeze Dance using the yoga cards with a 2- or 3-star level rating Kids Yoga Challenge Pose cards | Yoga mats and Kids Yoga Challenge Pose cards | none |
| Week 4 | 1. Students will actively participate while LS demonstrate 5 strength activities. 2. LS will still be able to explain what it means to include strength training activities. | Demonstrate various strength activities for students to lead. Students will choose activity and number of times an activity will be performed. | Various pictures representing strength activity | Fruit shaped note pad |
| Week 5 | 1. LS will be able to explain what stamina mean in relation to physical activities. 2. Students will actively participate while LS | LS will choose activities to demonstrate and the length of time for each activity. Students will enjoy a fun activity of chair volleyball | beach ball, activity cards representing endurance exercises. | none |

| | | | | |
|--------|---|---|--|--------------|
| | demonstrate various activities that increase stamina. | . | | |
| Week 6 | <p>1 Students will actively participate while the LS demonstrate 5 activities that increase the heart rate.</p> <p>2. Students will actively listen while the LS students explain cardiovascular activities and 2 places to locate a pulse on their body.</p> | Students will choose 5 activities to demonstrate to their classmates and length of time for each. LS will play | Various pictures representing activities that demonstrate ways to increase their heart rate. | Jump rope |
| Week 7 | <p>1. LS will be able to explain a variety of healthy drink choices.</p> <p>2. Students will actively participate in the water challenge as designed by the LS</p> | water activity with celery and dyed water(Balance My Day) , students will track the amount of water they drink daily for 2 weeks. Students will try infused water. | <p>video that discusses importance of water https://youtu.be/ikX1hODRKU0 (Common Bytes)</p> <p>Water, clear vase or large cup, red food coloring, 2 stalks of celery</p> <p>Water, ice cubes, variety of fruit, water pitcher, knife, cutting board, cups</p> | Water bottle |

| | | | | |
|-----------|--|--|--|-------------|
| | | Brainstorm drink choices | | |
| Week 8 | <p>.</p> <ol style="list-style-type: none"> 1. Students will actively participate while the LS demonstrate 5 calming breaths. 2. LS will explain how the breath can be calming to the body. | Practice five breathing exercises for calming the body, for classroom demonstration; Breathing Exercises for Kids: Help Children Learn to calm and focus | <p>Breathing Exercises for Kids: Help Children Learn to calm and focus</p> <p>Video: GoNoodle</p> <p>https://go.osu.edu/breathingbygonoodle</p> | Stress ball |
| Week 9 | <ol style="list-style-type: none"> 1. LS will be able to explain various way to increase physical activity. 2. LS will be able to list their top 5 activities for reaching 60 minutes of physical activity daily | Food Fitness) Minnesota Extension Energizer activity) | None | T-shirt |
| | | | | |

4th and 5th grade

Overall Program objective: To increase students' physical activity throughout the school day.

Each teacher will be given a classroom chart. This chart will be used to keep track of the days the leadership group informs and leads the class in a physical activity break that was presented in the previous leadership group. At the end of the final weeks the classes that have shown they are committed to increasing physical activity by completing their physical activity goal, will have the opportunity to create their own smoothies using a smoothie bike.

The leadership students will receive incentives throughout the program when they demonstrate how they have encouraged their classmates to be more physically active. The classroom teacher will be given the chart to help keep track of how many times the students demonstrate physical activity utilizing the 4 weeks check off chart provided.

**LS= Leadership Students

| 4 th and 5 th grade | Objective | Activity | Materials | incentive |
|--|--|--|--|-----------|
| Week 1 | 1.Leadership students will be able to identify and explain the program goals of Motivator in Motion and take a pretest to assess prior knowledge. 2.LS will be able to identify 5 | With minimal assistance from the group leader the students will create a personal goal for their group and a personal goal for cloud mode. Each student will share their | information on what the health group is about for the leadership students to take home. Paper and pencil will be used to write down group and personal goals. | none |

| | | | | |
|--------|--|---|--|------------------------|
| | characteristics of a positive leader. 3.LS will set a personal activity goal to reach by the end of the 9-week program. | goal or the group's goal. Decide which role of leadership each student will take one, speaker, leader, organizer, presenter, and evaluator. | | |
| Week2 | 1.LS will identify the benefits of including 60 minutes of physical activity daily. 2. Students will actively participate with the LS in logging their activity level for accountability. | Students will record their activities for 14 days and reflect on how they achieved physical activity or how it was hard to achieve physical activity. The students will reassess their previous goal if necessary | Video that discusses the importance of physical activity and the activity log handout Video link: https://www.youtube.com/watch?v=7TregDRcrBw ??? | Fruit or vegetable pen |
| Week 3 | 1.Students will actively participate while LS demonstrate 7 yoga poses to increase flexibility. | Practice various yoga poses using the Yoga Flow activity. Students will choose which 5-7 yoga poses to teach | Yoga mats and Kids Yoga Challenge Pose cards | none |

| | | | | |
|--------|---|--|---|------|
| | 2.LS will be able to identify why flexibility is important to maintain a healthy lifestyle. | classmates with any star rating level. (Kids Yoga Challenge Pose cards) | | |
| Week 4 | 1.LS will be able to define the 3 different kinds of muscles. 2. LS demonstrate and identify 7 strength activities and the muscles targeted | Demonstrate various strength activities for LS to choose from for classroom demonstration | Video Clip: https://go.osu.edu/musclebygonoodle heart worksheet pictures of the skeletal ,smooth and cardiac muscles | None |
| Week 5 | 1.Students will actively participate while LS demonstrate various endurance activities and actively listen while LS describe the benefits of endurance activities. 2.LS will collaborate with the PE teacher to offer 1-2 PE | Students will jump rope at various intervals to increase endurance, 15 seconds, 25 seconds, 45 seconds, 60 seconds, and 90 seconds. Watch a video Brainstorm ideas for PE class that would include endurance | 15-jump ropes Video Clip: https://go.osu.edu/endurancebygonoodle | none |

| | | | | |
|--------|---|--|--|-----------------------|
| | classes that emphasizes endurance activities | | | |
| Week 6 | <p>1.Student will actively participate while the LS demonstrate 7 cardiovascular activities.</p> <p>2.LS will be able to describe the importance of cardiovascular activities.</p> <p>3. LS will be able to take their pulse correctly before and after activity.</p> | <p>Practice cardio exercises for classroom demonstration</p> <p>LS will choose 5-7 activities to demonstrate and length of time. LS will play Frisbee Tag</p> | <p>15 frisbees</p> <p>Heart handout</p> | frisbee-CYP incentive |
| Week 7 | <p>1. LS will be able to recognize how important water is and how makes up a large volume of the body.</p> <p>2.LS will be able to identify healthy drink choices by reading the nutrition label.</p> | <p>Reading over variety of drink labels</p> <p>Students will set the amount of time they will track water intake for the class.</p> <p>Sample infused water.</p> | <p>video that discusses importance of water</p> <p>Items for infused water,</p> <p>Variety of drink labels</p> <p>Handout on increasing water</p> <p>video: https://go.osu.edu/water4thand5th (Common Bites)</p> | Water bottle |

| | | | | |
|--------|---|---|--|-------------|
| | 3.Students will actively participate with the LS in tracking their water intake for a specific amount of time as set by the LS. | | | |
| Week 8 | 1.Students will actively participate while LS demonstrate 7 breathing techniques to calm the body and mind. 2.LS will explain the importance of calming the body and mind. | Practice calming exercises from (Breathing Exercises for Kids: Help Children Learn to calm and focus), LS will choose 7 to demonstrate to their classmates. | . Breathing Exercises for Kids: Help Children Learn to calm and focus Video: https://go.osu.edu/breathingbygonoodle | Stress ball |
| week 9 | 1.LS will be able to identify a variety of healthy activities that increase physical activity. 2. LS will reflect on their initial goals. | Hit the Deck (Minnesota Extension Energizer activity) | Surveys Deck of cards | T shirt |

| | | | | |
|--|---|--|--|--|
| | 3. LS will complete a post survey to demonstrate what was learned and changes made prior to the start of the program. | | | |
|--|---|--|--|--|

Appendix D

4th and 5th grade week 3

Stretch it out

Objectives:

1. LS will be able to identify why flexibility is important to maintain a healthy lifestyle.
2. Students will actively participate while LS demonstrate 5-7 yoga poses to increase flexibility.

Material:

25 yoga mats (optional)

Kids Yoga Challenge Pose cards available to purchase through Amazon

Rubber band

Camera or phone with recording capabilities

Sample video message

Discussion:

1. Ask students by a show of hands how many of them take time to stretch daily? Share that stretching should be incorporated into our physical activity because it helps to prevent the body from becoming injured during play.
2. Add that in the morning we may stretch when we get out of bed because our body was sleeping all night and needs to be woken up. Stretching is a great way to calmly wake your body up and get moving.
3. There are right ways to stretch and wrong ways to stretch. First if a stretch ever hurts, stop. it may be uncomfortable, but pain is an indicator of telling your body to stop. Try and hold the stretch for 10 seconds up to 30 seconds. This allows for a slow stretch and decrease the

chances of over stretching a muscle. Think of a rubber band. If you are stretching it too far it will break, but slowly stretching it out will allow for it to stretch without breaking.

4. Continue that when you stretch make sure to not bounce. Bouncing may injure the muscles you are stretching. Make sure to breath and perform the identical stretch on the opposite side of the body.
5. When you stretch 3 days a week you will increase your flexibility and help to reduce injury to the muscle.
6. Stretching is not only good for the muscles, but also calming for the body and mind. Stretching helps to lower your heart rate and breathing down after physical activity, reduces the chances of being lightheaded or dizzy and allows for you to feel the benefits of being physically active.
7. You do not need to have any kind of equipment or large space to stretch. You can do it while watching your favorite movie or TV show while relaxing at night. You can even stretch while seated.
8. One of the best ways to help with flexibility or stretching is through yoga. Yoga provides a gentle stretch that wakes the body up. You can do yoga alone or do it after your physical activity for added benefits.

<https://kidshealth.org/en/teens/stretching.html#cattraining>

Activity:

1. Provide each student with a yoga mat. Have the students roll out each mat onto the floor and sit on the mat.
2. Take the Kids Yoga Challenge Pose cards and select the cards with a star rating of 2 or 3.
3. Practice various poses with the students.
4. Have the students choose 5-7 poses they would like to record for their classmates and practice prior to recording.
5. Record the video.

Assessment:

1. Ask the students to share why they should increase their flexibility. Listen for accuracy of responses
2. Ask the students to name 4 yoga poses that will increase flexibility.
3. True or False- You should bounce while stretching- False, bouncing can injury the muscle that is being stretched. A slow easy stretch is most beneficial
4. True or False- You should hold a stretch for 10 seconds- True holding a stretch for 10-30 seconds will provide the most benefit and less incident of injury.

5. Have the students demonstrate their chosen yoga poses just as they would for classroom discussion.

Sample Video Message:

Good morning,

We are a part of the Motivation Movers leadership group. Did you know that kids our age need a minimum of 60 minutes of physical activity each day to stay healthy? One of those activities can include stretching. Stretching increases flexibility, wakes your body up, calms your mind and body, helps to lower your heart rate, and reduces the risk of injury. The best thing about stretching is anyone can do it.

A few things to remember about stretching though

- Do not bounce while stretching
- Go slowly- holding the stretch for at least 10 seconds
- Stop if it hurts- may be uncomfortable but not painful
- Stretch daily or at least 3 times per week

A great way to stretch is through Yoga. We will demonstrate some yoga poses and encourage you to join us.

