Engaging Children in Healthy Occupations (ECHO) program development plan

Lauren Tooman
The University of Toledo

Follow this and additional works at: http://utdr.utoledo.edu/graduate-projects
Engaging Children in Healthy Occupations (ECHO) Program Development Plan

Lauren M. Tooman

Site Mentor: Carla Niese

Faculty Mentor: Beth Ann Hatkevich, Ph.D., OTR/L

Occupational Therapy Doctorate Program

Department of Occupational Therapy

The University of Toledo Health Science Campus

May 2009
Table of Contents

Executive Summary

Introduction

Program Goal

Sponsoring Agency

Investigation of Needs

Literature Review

Factors Contributing to Childhood Obesity

The Cost of Obesity

Occupational Therapy in the Role of Childhood Obesity

Plans to Investigate Future Needs for Programming

Model of Human Occupation

Objectives

Marketing and Recruitment of Participants

Participants and Inclusion criteria

Programming

ECHO Program Week One

ECHO Program Week Two

ECHO Program Week Three

ECHO Program Week Four

ECHO Program Week Five

ECHO Program Week Six

ECHO Program Week Seven
ECHO Program Week Eight

Occupational Therapy Model of Practice

Assessments

Budgeting and Staffing

Budgeting

Staffing

Funding Sources

Self-Sufficiency Plan

Program Evaluation

Evaluation Procedures

Stakeholders

Timeline

Letters of Support

References

Appendix A:

Appendix B:

Appendix C:

Appendix D:

Appendix E:

Appendix F:

Appendix G:

Appendix H:

Appendix I:
Appendix J:

Appendix K:

Appendix L:

Appendix M:

Appendix N:

Appendix O:

Appendix P:

Appendix Q:
Executive Summary

In the United States, children ages six to eleven were more than two and a half times as likely to be overweight in 2003-2004 as they were in 1976-1980 (approximately 19 percent versus 7 percent) (Child Trends Databank, 2003). In Ohio, the prevalence of overweight/obese 3rd graders was similar to national trends, and 17% of third graders were overweight (using current CDC guidelines), while 20.6% were obese (Ohio Collaborative Research and Policy for Schools, Children, and Families, 2007). In Ohio, 14,543 students were chosen randomly for a childhood obesity data study, and it was found that children eligible for free and reduced school meals as well as children in rural counties were more likely to be overweight or obese (Ohio Collaborative Research and Policy for Schools, Children, and Families, 2007). Presently, the sponsoring agency of the Engaging Children in Healthy Occupations (ECHO) program, the Putnam County YMCA, offers no after school or health and wellness programs for children ages 7 through 12 years old. Although there are some sports programs for youth, these programs do not address important health aspects besides physical fitness, such as healthy nutrition and self-esteem. This is alarming because overweight and obese conditions increase a child’s risk for the condition to persist into adulthood, and it also increases a persons risk for some chronic diseases later in life (U.S. Department of Health and Human Services, 2000).

The goal of the Engaging Children in Healthy Occupations (ECHO) Program is to increase children’s knowledge and engagement in childhood nutrition, physical fitness, and improve psychosocial skills through occupationally based programming in order to fight the childhood obesity epidemic. The definition of psychosocial skills includes a child’s self-esteem and body image, and developmentally age appropriate social interaction skills. The program objectives focus on an occupational approach to setting and attaining goals, improving food intake, increasing amount of time spent active, and improving
psychosocial skills such as self-esteem and social interaction skills. An estimated 192 children will be served by the ECHO program within the first year, engaging in a process of initial assessment, goal setting, program intervention, and post intervention assessment. The ECHO program will use a pre-test, post-test self-report and BMI outcome measures that will help the Putnam County YMCA verify program effectiveness. Also, formative evaluations will be used, because child and parent feedback are crucial to the success and efficiency of the ECHO program.
Introduction

Program Goal

The goal of the Engaging Children in Healthy Occupations (ECHO) Program is to increase children’s knowledge and engagement in healthy nutrition, physical fitness, and improve psychosocial skills through occupationally based programming in order to fight the childhood obesity epidemic. The definition of psychosocial skills includes a child’s self-esteem and body image, and developmentally age appropriate social interaction skills.

Sponsoring Agency

The site of the proposed ECHO program is the Putnam County YMCA located in Ottawa, OH. The YMCA is the sponsoring agency, and the mission of the YMCA is “To put Christian principles into practice though programs that build healthy spirit, mind, and body for all.” An organizational chart for the Putnam County YMCA can be found in Appendix A.

Investigation of Needs

In order to assess the need for an after school wellness program, a survey was given in order to assess interest in the ECHO program (Appendix B). The survey was distributed in person by the Occupational Therapy Doctoral student, and was given only to people who have children. The survey was completed by members and non-members of the Putnam County YMCA, and also by parents from surrounding communities such as Leipsic and Miller City, Ohio at a high school sporting event. Some parents declined to complete the survey because they stated that they have children that are in college were simply not interested in completing a survey about an after school program. Appendix C is a graph showing the results of the 72 surveys that were completed by parents. Add number and percentage descriptions of the survey and what they mean.
Literature Review

In the last two decades, the incidence of overweight American children from ages 6 to 11 has doubled, and approximately 25 million children are overweight or nearly overweight according to the Body Mass Index (BMI) (Mayo Clinic Staff, 2006). As more and more children are likely to be overweight or nearly overweight, it is important that they have opportunities to engage in physical activity and learn about healthy lifestyle habits. The proposed ECHO program will engage and educate children on wellness using occupational therapy based models of practice and intervention strategies. The ECHO program will incorporate a holistic approach to wellness, and will be based on three main components: childhood nutrition, physical fitness, and psychosocial skills. Eating, food preparation, social participation, and physical activity are all parts of a person’s occupational domain (American Occupational Therapy Association, 2007). A person’s food consumption, psychosocial interactions, and physical activity are all necessary occupations of every human being’s daily life. An occupational therapist can help improve and promote health for these vital and necessary daily occupations.

The frequency in the United States of overweight children has changed little from the early 1960s through 1980; but since 1980 the rates have sharply increased (Federal Interagency Forum on Child and Family Statistics, 2007). From 1999 to 2004, being overweight increased for both boys and girls. In 2003-2004, the proportion of children who were overweight in the United States was 18 percent (Federal Interagency Forum on Child and Family Statistics, 2007). It was also estimated that only 36 percent of adolescents meet current physical activity recommendations, and about 20 percent eat the recommended amount of five or more servings of fruits and vegetables per day (Federal Interagency Forum on Child and Family Statistics, 2007).
The United States and Ohio have both experienced increasing incidences of overweight children. Nationally, children ages six to eleven were more than two and a half times as likely to be overweight in 2003-2004 as they were in 1976-1980 (approximately 19 percent versus 7 percent) (Child Trends Databank, 2003). The United States also had more than one in six adolescents ages 12 to 19 who were overweight in 2003-2004 (17 percent), which was more than triple the rate in 1976-1980 (5 percent) (Child Trends Databank, 2003). In the state of Ohio, the incidence of overweight or nearly overweight children is also at elevated rates. According to the Ohio Department of Health (2009), 35.6% of Ohio youth ages 10 to 17 are overweight and obese. Ohio is the 17th-heaviest state in the country, and experts are predicting if trends continue, today youth will live shorter lives than their parents (Ohio Department of Healthy, 2009).

Factors Contributing to Childhood Obesity

Possible factors that may be contributing to the rapid rise in overweight and obese children in the United States and Indiana include recess being decreased in schools, and an increased number of working mothers. Other factors that are contributing to childhood obesity include an increased number of single mothers, fast food portion sizes are larger than previous decades, and children are eating fast food often. The final factor that is contributing to the rise of childhood obesity is the amount of sedentary activity a child is engaged in (e.g., television watching and computer time).

The first factor that may contribute to the rising rates of childhood obesity is recess time being decreased in schools. Physical inactivity can pose many health threats for children, and inactivity is associated with the tripling rate of childhood obesity since 1970 (Jarrett, 2007). Experimental research has found that children were actually less active after school on days
when they had no physical education classes and recess in school (Jarrett, 2007). Statistics show 
that most public elementary schools reported scheduled recess for students (United States 
Department of Education, 2006). Although 55 to 58 percent of schools have scheduled recess 
one per day, only 21 to 27 percent of schools have recess for more than 30 minutes (United 
States Department of Education, 2006). This is not enough to meet the recommended sixty 
minutes of moderate physical activity most days of the week, preferably daily (United States 
Department of Health and Human Services, 2008). Also, the average number of minutes per day 
of schedule recess only ranged from 27.8 for first grade to 23.8 for sixth grades (United States 
Department of Education, 2006). Therefore, even if children are getting recess daily, if the 
average number of minutes isn’t even half of the recommended 60 minutes of moderate intensity 
physical activity for children, children should be getting more physical activity after the school 
day (United States Department of Health and Human Services, 2008).

Another factor that is contributing to the increased number of overweight and obese 
children is the number of mothers participating in the labor force. The number of mothers in the 
labor force has increased over the past 50 years (United States Department of Treasury, 2006). 
Many more mothers are working, and as a result may be spending less time cooking and actively 
engaging with their children after school. Children either may be taking care of themselves or 
attending after school care at facilities such as the YMCA. In 1947 just over 25% of all mothers 
with children between the ages of 6 and 17 were in the labor force (U.S. Department of Treasury, 
2006). By 2003, participation of mothers in the labor force of the same age group was 60% 
(U.S. Department of Treasury, 2006). The involvement of mothers in the labor force for younger 
children has similar trends. For example, in 1996 over half of all mothers with their youngest 
child less than 3 years old were in the labor force. In 1965, about one-fifth of mothers with their
youngest child less than three years old worked. Because more families are experience both parents or a single parenting working, parents may be making little time for healthy meal making and daily exercise.

Not only are more women working, but the number of children being raised by a single parent is also increasing. In 1995, more than one-quarter of children were in families headed by a single parent, up from less than one in ten children being raised by a single parent in 1960 (U.S. Department of Treasury, 2006). In a study by Strauss & Knight (1999), the researchers investigated the association between the home environment and socioeconomic factors and the development of obesity in children. A total of 2913 normal weight children between the ages of 0 and 8 years were followed over a 6-year period (Strauss & Knight, 1999). The study observed the roles of race, marital status, maternal education, family income, parental occupation, as well as standardized measures of the home environment (The Home Observation for Measurement of the Environment (HOME)-Short Form)(Strauss & Knight, 1999). The primary outcome measure used for this study was the incidence of obesity, and Obesity was defined as a body mass index >95th percentile for age and gender at the 6-year follow-up (Strauss & Knight, 1999). The results showed that maternal obesity was the most significant predictor of childhood obesity (Strauss & Knight, 1999). The HOME-Short form cognitive scores and household income were also significant predictors of childhood obesity (OR, low HOME-cognitive: 2.64 (1.48-4.70), medium HOME-cognitive: 2.32 (1.39-3.88); low income: 2.91 (1.66-5.08), medium income: 2.04 (1.21-3.44) (Strauss & Knight, 1999). Approximately a third of the mothers were single, and children who lived with a single mother were also substantially more likely to become obese by the 6-year follow-up (Strauss & Knight, 1999). Strauss and Knight (1999) also found that by the 6-year follow-up black children, children with nonworking parents, children with nonprofessional
parents, and children whose mothers did not complete high school were also more likely to be obese. The study by Strauss & Knight (1999) also documented potentially a greater than twofold increased risk of developing obesity in children with lower cognitive stimulation compared with those having the highest levels of cognitive stimulation. The elevated prevalence of obesity remained after correcting for maternal obesity, initial weight-for-height z-score, gender, socioeconomic factors, race, and marital status (Strauss & Knight, 1999). The elevated risk of childhood obesity associated with lower cognitive stimulation was demonstrated consistently among single mothers and minorities, as well as those with the lowest income and education (Strauss & Knight, 1999). A single parent may have less time to spend with his or her child because he or she may be working multiple jobs, or will be the only person responsible for all of the household and childcare duties. Because of the likely circumstances of multiple jobs or increased responsibility, children likely have fewer chances for activity and may be more likely to eat convenience foods. Because many more woman are working and/or are more likely to be a single parent, for many children after school care is more likely to be the majority rather than the minority. Also, a single parent may be working more than one job to support his or her family. Programs implemented to educate and promote healthy habits and knowledge for children are a role that an occupational therapy professional will be able to provide because many parents may be have limited time to provide that for their children.

Again not only does a child face challenges with limited recess time in school as well as possibly living with working/single parents, more children are consuming fast food. Also, the portions in fast food restaurants are increasing. According to Young (2007), Americans spend nearly half their yearly food budget eating out. A parallel between rising rates of obesity and portion sizes have been found (Young, 2007). Presently, fast-food servings are two to five times
larger than they were in the 1950’s. When McDonald’s originally opened, a soda was 7 ounces. Today, a child’s size soda is 12 ounces, a small soda is 16 ounces, and the large soda is 32 ounces (Young, 2007). The increasing portion sizes in the fast food industry are alarming. Based on a study of children questioned in a government survey from 1994 to 1996 and 1998, nearly one-third of U.S. children aged 4 to 19 eat fast food daily (CNN.com, 2004). The children who eat fast food eat an average of 187 more daily calories than youngsters who don’t eat fast food. The extra calories add up to about six extra pounds a year (CNN.com, 2004).

A final factor contributing to the rising rate of childhood obesity is the amount of time children spend engaged in sedentary activity. Not only are children eating fast food frequently, the number of minutes the average child 2-11 years old watches television is 171 minutes (just under 3 hours) a day. Even more alarming is than children spending a significant amount of their time in front of the television, they spend even more time a day sitting in front of screen of some kind. The average number of hours per day American children spend in front of a screen of some kind is 4.35 (Catholic Education Resource Center, 2000). Therefore, if a child does not have an opportunity engage in the recommended 60 minutes of physical activity during recess at school, and is home in front of screen for 3-4 hours, a child is spending the majority of the day very sedentary and inactive.

According to Healthy People 2010 (U.S Department of Health and Human Services, 2000), objective 19-3 has been set to reduce the number of overweight or obese children and adolescents. In 1988, 11 percent of children ages 6 to 19 years were defined as obese or overweight. The 2010 target is 5 percent for this age group. There is a lot of concern for children and adolescents who are overweight or obese. This state is alarming because acquiring this condition during childhood or adolescence may persist into adulthood, and increase the risk for
some chronic diseases later in life (U.S. Department of Health and Human Services, 2000). Also, teenaged boys lose some fat accumulated before puberty during adolescence, but fat deposition continues in girls (U.S. Department of Health and Human Services, 2000).

Interventions need to recognize that obese children also may experience psychological stress (U.S. Department of Health and Human Services, 2000), and that is why it is important that the ECHO program addresses psychosocial skills and health. The U.S. Department of Health and Human Services (2000) emphasizes that a reduction in a child’s BMI should be achieved by focusing on properly balanced diet and physical activity so that healthy growth continues.

Ideally, children would have many opportunities to engage in physical activity at school, as well as healthy food available at school and in the home. Some children may not have breakfast, school lunches may have poor nutritional value, and only unhealthy snacks may be available in the home. Parents may not make their children healthy meals when they are home, and since American’s spend nearly half of their food budget eating out, a child is likely eating unhealthy fast food or restaurant meals on a regular basis (Young, 2007).

The Cost of Obesity

Not only does obesity have detrimental social and physical implications for a person, obesity is a disease that costs our healthcare system billions of dollars every year. Seventy-five percent of what we spend in this country is associated with patients that have one or more chronic condition (Reinberg, 2007). Many studies done have found that obesity appears correlated with increased risk of both acute and chronic diseases. Diseases that obesity is correlated with are: type II diabetes, sleep apnea, chronic low back pain, hypertension, breast cancer, cardiovascular disease, stroke, prostrate cancer, colon cancer, gall bladder disease, joint problems, psychological issues, activity limitations, and reduced generalized health ratings
(Clark et al., 2007). These related medical costs are estimated to be $99.2 billion dollars annually (Clark et al., 2007). American adults are also more likely than Europeans to have heart disease, cancer, diabetes, and chronic lung disease (Reinberg, 2007). All of these conditions are associated with obesity and/or smoking. If the prevalence of obesity could be reduced (and also chronic diseases associated with obesity), a team of experts estimates that health care spending could be cut by $100 billion to $150 billion per year. This reduction would equal approximately an 18.7 percent decreased spending in the nation’s total health-care budget (Reinberg, 2007).

*Occupational Therapy in the Role of Childhood Obesity*

According to the American Occupational Therapy Association (AOTA), obesity is a substantial health and social problem in the United States (Clark et al., 2007). Occupational therapy is a profession that is prepared to provide clients with interventions to effect change and promote optimum health (Clark et al., 2007). Because of the widespread obesity crisis in the United States, prevention programs will become an essential component of changing this trend. Occupational therapy is a profession that was founded on the belief that we should focus on helping people to engage in daily life activities that they find meaningful and purposeful (Clark et al., 2007).

An occupational therapist is an appropriate professional to organize and carry out a holistic wellness program for children. The American Occupational Therapy Association, Inc. supports and promotes the involvement of the occupational therapist in the development and provision of health promotion and disease/disability prevention programs and services (Brownson & Scaffa, 2001). When a person engages in occupation, this includes both emotional or psychological aspects of performance, as well as physical aspects of performance (American Occupational Therapy Association, 2007). A person’s nutritional intake, physical activities, and
psychosocial interactions and skills are all domains of occupations of daily living (American Occupational Therapy Association, 2007).

The American Occupational Therapy Association supports and promotes occupational therapy professionals to be involved with primary, secondary, and tertiary prevention for the management of obesity. An occupational therapy professional is knowledgeable and competent in many areas including: psychosocial, physical, environmental, and cultural traditions and perspectives related to performance (Clark et al., 2007). The occupational therapy healthcare professional can develop an individualized approach to lifestyle change (Clark et al., 2007). An occupational therapy professional understands the importance of meaningful activities to their clients. An occupational therapist will find ways to help a person change his or her habits and routines in order to make permanent lifestyle and occupations changes. The occupational therapy professional will not offer short term and non permanent solutions to improving health, such as dieting or engaging in physical activities that aren’t enjoyable. An occupation based approach to wellness is a holistic and client-centered approach to lifestyle through participation in activities that promote health (Clark et al., 2007). Therefore, the occupational therapy professional is an ideal healthcare provider for the ECHO program because of the profession’s fundamental belief in meaningful occupation. The belief in occupation and healthy lifestyle changes are the principles that the ECHO program is based on.

The American Occupational Therapy Association also supports occupational therapy professionals complementing the existing health promotion efforts by adding the uniqueness of occupation to develop and implement programs that promote a healthy lifestyle to children and their families (Brownson & Scaffa, 2001). Because children are the future of America, it is important to promote healthy lifestyles and well being to our nation’s future. Occupational
therapy professionals can educate children on ways to make their daily occupations healthier. The proposed ECHO program will also incorporate active engagement from the program participants in healthy food preparation and occupation based physical activities. Eating and physical activity are a part of a person’s daily occupational domain, and occupational therapists can give suggestions and actively teach children how to make those occupations healthier (American Occupational Therapy Association, 2007). The occupational therapy healthcare professional can also educate children about the importance of healthy lifestyle habits. The ECHO program will promote children becoming involved in meaningful and purposeful occupations (e.g., cooking healthy meals and snacks, and engaging in meaningful physical fitness occupations).

Plans to Investigate Future Needs for Programming

In order to investigate the future needs of the ECHO program, methods of data gathering are necessary in order to offer the best program possible. One method to investigate the needs of the consumers is focus groups. A focus group is a way of listening to people and learning from them (Morgan, 1998). A second method of data gathering is a survey. According to Rea and Parker (1997), surveys include questions designed to gather descriptive information about the respondent. A survey (Appendix B) was created to gather data from parents of potential participants about interest in the ECHO program. The survey in Appendix B also allowed the parents to list what topics they would be interested in for their child (e.g., nutrition, fitness, social skills, self-esteem, or others). Again, as mentioned earlier, the results of the survey can be found in Appendix C. A third method of data gathering is through field observation. Field observation was completed with children that would be possible program participants. In field observation, the investigator seeks to understand an insider’s view of the phenomena under a thorough
immersion of the environment (Kielhofner, 2006). The field observation helped shape the ECHO program development. The ECHO program was developed by an occupational therapist, and many hours were spent observing and interacting with children at the Parkview YMCA in Fort Wayne, Indiana, as well as the Putnam County YMCA. An outline and brief descriptions of the time spent observing children is included in Appendix D.

Model of Human Occupation

The ECHO program will be based on an occupational therapy model of practice. The Model of Human Occupation (MOHO), developed by Gary Kielhofner, will be the occupational therapy model of practice the ECHO program will be based on (Kielhofner, 2002). The Model of Human Occupation seeks to explain how occupations are motivated, patterned, and performed (Kielhofner, 2002). The model also emphasizes that in order to understand human occupation; we must then understand the social and physical environments in which they take place (Kielhofner, 2002). The theory relates to the ECHO program because the theory recognizes that physical as well as behavioral components are vital components of the human lifestyle. The model also recognizes that social and physical environments are integral components of a human’s occupations. For example, social habits and routines around food and eating could be different for Latino females rather than an African American male because of cultural or ethnic traditions. For example, a Latino female may feel that her diet must include tortillas. Eating tortillas and other Mexican food may be a cultural and family tradition. The program will be sensitive to the cultural and individual differences of each child and family. The ECHO program will tailor each child’s goals and lifestyle changes to meet social demands. The program will focus on not just one health component, but a holistic approach focused on
childhood nutrition, fitness, and psychosocial skills aimed at improving a child’s habits and routines.

This model is a system’s perspective of the person, focusing on the constant interaction of person, task, and environment. The model views occupational therapy as a profession that helps a person to engage in occupational behavior that will enable him or her to live meaningful life roles (Bruce & Borg, 2002). In clinical practice, the model has been a framework for programs in the community, and has been used for interventions with the non-mental health pediatric population (Bruce & Borg, 2002). Studies using MOHO as a model to evaluate and look at a patient have found that a person with occupational dysfunction shows problems with daily function, self-esteem, sense of control, role behavior, and everyday habits (Bruce & Borg, 2002). The ECHO program addresses self-esteem and role behavior, which are important psychosocial components that affect a child’s everyday occupational performance. Healthy habits and roles will also be discussed and are an important aspect of healthy occupational engagement.

The Model of Human Occupation views a person as an open system that consists of three subsystems that work together. The first system is the volition subsystem. This system determines the person’s occupational behavior. The second system organizes occupational behavior into patterns or routines, and is known as the habituation subsystem. The final subsystem is the mind-brain-body performance subsystem. The mind-brain-body performance subsystem is important because it allows a person the ability to achieve skilled occupations (Bruce & Borg, 2002).

The volitional system involves a person’s personal causation, values, and interests (Bruce & Borg, 2002). Personal causation is a person’s self-efficacy in occupations. The ECHO
program will help the child improve confidence and self-esteem, and therefore will increase his or her level of personal causation. A belief of the Model of Human Occupation is that all people have a certain level of value and conviction, and will assign significance to highly valued occupations (Bruce & Borg, 2002). Also, MOHO views interests as a component of volition, and they are defined as enjoyment in an occupation (Bruce & Borg, 2002). The ECHO program will have sessions that allow the children to choose occupations that are valued and of interest to the group, and again aims to increase the level of volition that the participating children have.

The next subsystem of the MOHO system is known as the habituation subsystem. This system is composed of habits and roles (Bruce & Borg, 2002). Habits are learned through repetition of behavior and they tend to guide human automatic behavior (Bruce & Borg, 2002). Roles are another component of the habituation subsystem, and it is the awareness of a certain social identity and related obligations that provide a framework for constructing the behavior viewed as appropriate in various situations (Bruce & Borg, 2002). It is important to help a child learn positive habits and roles, because eating patterns generally remain stable throughout a person’s life (Bruce & Borg, 2002). The ECHO program will help a child identify habits and roles that he or she has related to eating, fitness, and psychosocial skills. In order to help a child embrace and develop healthy lifestyle habits and roles, it is essential to start young so that the stable habits and roles throughout his or her life are healthy.

The last subsystem of MOHO is called the mind-brain-body performance. This subsystem is made up of what we have to perform with (Bruce & Borg, 2002). Four categories make up a person’s mind-brain-body performance subsystem, and these are the musculoskeletal system, neurological system, cardiopulmonary system, and the symbolic system (Bruce & Borg, 2002). The symbolic system is made up of images that guide a person in his or performance of
occupational behavior (Bruce & Borg, 2002). It is essential to help a child learn about his or her body, and how important it is to take care of the mind-brain-body performance subsystem. The ECHO program will not only address taking care of one’s body, but the psychosocial skills addressed will focus on how important a healthy mind is to overall health.

Federal Initiatives

As stated previously, according to Healthy People 2010 (U.S. Department of Health and Human Services, 2000), objective 19-3 has been set to reduce the number of overweight or obese children and adolescents. In 1988, 11 percent of children ages 6 to 19 years were defined as obese or overweight. In 2003-2004, that number jumped to 18 percent (Federal Intragency Forum on Child and Family Statistics, 2007). The 2010 target is 5 percent for this age group. There is a lot of concern for children and adolescents who are overweight or obese. The U.S. Department of Health and Human Services (2000) emphasizes that a reduction in a child’s BMI should be achieved by focusing on properly balanced diet and physical activity so that healthy growth continues. The ECHO program would be able to meet this objective by monitoring the child’s BMI. The BMI will be recorded at the beginning and end of the program (Appendix E).

Other related objectives in Healthy People 2010 that were set are food and nutrient consumption objectives (U.S. Department of Health and Human Services, 2000). Objective 19-5 is to increase the proportion of persons aged 2 years and older who consume at least two daily servings of fruit. The target is 75 percent, and the baseline for this objective is 28 percent (U.S. Department of Health and Human Services, 2000). The ECHO program would be able to meet this objective because healthy snack and meal preparation including fruit servings will be provided. As part of the child’s participation in the program, an objective for all participants is
to be consuming at least two daily servings of fruit by the conclusion of the ECHO program. This information will be reported by the parent and child in the self report (Appendix D).

Another objective that would be met by the ECHO program would be objective 19-6, which aims to increase the proportion of persons aged 2 years and older who consume at least three daily servings of vegetables (U.S. Department of Health and Human Services, 2000). The target for this objective is 50 percent, and only 3 percent of persons aged 2 years and older consumed at least three daily servings of vegetables (U.S. Department of Health and Human Services, 2000). This objective would be addressed through the ECHO program because vegetables would be a part of the healthy meal and snack planning, as well as emphasized to be included in the home environment. The child would also learn the nutritional importance of vegetables, and therefore will be more likely to consume more vegetables. Again, as part of the child’s participation in the program, an objective for all participants is to be consuming at three daily servings of vegetables by the conclusion of the ECHO program. This information will be reported by the parent and child in the self report (Appendix E).

The next objective from Healthy People 2010 that will be addressed is 19-7 that aims to increase the proportion of persons aged 2 years and older who consume at least six daily servings of grain products, with at least three being whole grains (U.S. Department of Health and Human Services, 2000). The target is for 50 percent of the population to meet this goal, and the baseline is that 7 percent of persons meet this goal (U.S. Department of Health and Human Services, 2000). The ECHO program would meet this objective because the program would provide a snack including whole grain serving, and emphasize consuming more whole grains in the home.
Objective 19-11, is to increase the proportion of persons aged 2 years older who meet dietary recommendations for calcium (U.S. Department of Health and Human Services, 2000). The target is 75 percent, and the baseline is 46 percent (U.S. Department of Health and Human Services, 2000). The ECHO program will meet this objective because it will educate children on how to get the recommended daily amount of calcium. The program will be sensitive to food allergies, and will address alternatives for children who may not tolerate dairy products. The program will also teach children what one serving of calcium is, and to have healthy calcium rich choices available in the home.

The second federal initiative that relates to the ECHO program is to increase physical activity. Although everyone knows that a moderate amount of physical activity is good for your health, only 40% of people in America achieve that recommended amount (National Center for Chronic Disease Prevention and Health Promotion, 2008). The initiative is for the professional to create a program that is tailored to each individual, and will help the person become more active in activities that he or she may actually enjoy. The initiative is to focus on a behavior change at an individual and community level, rather than a quick fix for someone to lose weight. The ECHO program will aim to get at least 75% of program participants involved in the recommended amounts of moderate physical activity. The ECHO program will also meet this initiative because the program will help children find ways to become more physically active in occupations they enjoy, and each child will have a plan that fits his or her needs and wants.

The final federal initiative that relates to the ECHO program is Activate America. National partners who provide expert advice to YMCAs across the nation regarding Activate America include Centers for Disease Control and Prevention, the U.S. Department of Health and Human Services’ Steps to a HealthierUS initiative, Harvard School of Public Health, Stanford
University School of Medicine, Disney Channel, Kellogg Company, JCPenney After school Fund, Kimberly-Clark Corporation and PepsiCo (YMCA of the USA, 2007).

One objective of the Activate America initiative is for YMCA’s across the nation to get involved with engaging their communities to provide better opportunities for people of all ages in their pursuit of health and well-being in spirit, mind and body (YMCA of the USA, 2007). The ECHO program will help children to engage in their communities because the program will be teaching and educating children on pursuing better health in mind and body. The Parkview YMCA also is involved annually with Healthy Kids Day. This event is an interactive and fun event that encourages families and children to adopt healthier lifestyles (YMCA of the USA, 2007). The Parkview YMCA is involved with this effort, and the ECHO program can be advertised and promoted at this event. The ECHO program supports children and their families adopting healthier lifestyles, therefore this objective for the day will be met in part by the ECHO program.

Objectives

The goal of the Engaging Children in Healthy Occupations (ECHO) Program is to increase children’s knowledge and engagement in childhood nutrition, physical fitness, and improve psychosocial skills through occupationally based programming in order to fight the childhood obesity epidemic.

1. With the help of the occupational therapist, the ECHO program participants will identify at least two goals focused on improved nutrition, two goals towards improved physical fitness, and two goals towards improved psychosocial skills by week 1 (see Appendix F, goal sheet).
2. Three of the six participant goals will be met within Week 5 of the ECHO program, and will be recorded in Appendix G through an individual self report completed by the participant and the ECHO program facilitator.

3. Seventy five percent of the participants will have an overall improved increase of psychosocial skills at the conclusion of the ECHO program, as measured by pre-post psychosocial skills section of the self report completed by the parent and child together at pre-post intervention (Appendix G, Psychosocial Skills questions 1-4).

4. Seventy five percent of the participants will report consuming at least two servings of fruit and three servings of vegetable a day at the conclusion of the ECHO program, as measured by pre-post nutritional intake section of the self report completed by the parent and child together at pre-post intervention (Appendix G, Nutritional Intake questions 1-2).

5. At the conclusion of the program, seventy five percent of the participants will report physical activity for 60 minutes a day for at least 4 days of the week, as measured by the pre-post physical fitness section of the self report, completed by the parent and child together at pre-post intervention (Appendix G, Physical Fitness questions 2-3).

The above objectives are all occupation-based. The first objective is the child and ECHO facilitator collaboratively stating two measurable goals for improved nutrition, physical fitness, and psychosocial skills. The second objective is for the child to meet at least three of the six goals by the midterm of the ECHO program, which is week 5. Nutrition, physical fitness, and psychosocial skills are all daily and vital occupations to every human being. The ECHO program
facilitator can help the participant approach his or her goals in a creative, fun, and occupational manner. For example, the child may seek to do more physical activity at home, and may enjoy being outside and raking leaves as part of a physical fitness routine. The occupational therapist can also suggest family bike rides, or breaking up fitness time in 30 minute increments. The improved nutrition goal may be for the child to have only one healthy snack after school before dinnertime. Improving psychosocial skills can address body image, self-esteem, social interaction skills, and play skills with other children. It is important that children learn about what proper nutrition is all about. Also, physical activity is an important area to focus goal setting on, because children are spending many hours a day engaged in sedentary occupations.

Objective 3 is occupation based because it seeks to help a child improve his or her own self-esteem and psychological well-being, as well as to increase their skills in social situations. The ECHO program will engage the child in exercises to help increase and improve his or her self esteem and social skills. An example is that the child could discuss in a group one thing that he or she likes about himself or herself. The self-report found in Appendix D will assess the child at pre and post ECHO program intervention. The child and parent will complete the self report together during week 1 and again at week 8 of the program.

The fourth objective aims to increase the child’s fruit and vegetable intake. Eating and consuming healthy fruits and vegetables are an occupation based objective because eating is a daily occupation. According to Healthy People 2010, there is an objective to increase the percentage of persons aged 2 years and older who consume at least two daily servings of fruit (U.S. Department of Health, 2000). Healthy People 2010 stated that only 28% of American’s age 2 or older get at least two daily servings of fruit (U.S. Department of Heath, 2000). Increasing a child’s vegetable intake is also important because this is another objective set by
Healthy People 2010. The objective for Healthy People 2010 is that a person age 2 years or older consume at least three vegetable servings a day (U.S. Department of Health, 2000). According to Healthy People 2010, only 3 percent of persons age 2 or older consume at least three vegetable servings a day (U.S. Department of Health, 2000). Again, this objective will be measured by the self-report found in Appendix G.

The fifth objective is occupation based because it is measuring the average amount per day and frequency per week of physical activity each child is engaged in at pre and post ECHO program participation. The self report, which is Appendix G, will measure the amounts and frequency for each child participant at pre and post ECHO program participation. Physical activity is an essential occupation that provides a child with increased health and psychological benefits. Because children are eating out often, and spending multiple hours a day in sedentary activity, increasing the amount of physical activity occupations is very important. Encouraging and incorporating physical occupation into the child’s day is crucial to fighting the childhood obesity epidemic. Also, it is recommended that children should get at least 60 minutes of moderate intensity physical activity on most days (U.S. Department of Health and Human Services, 2008). It is important that children get up and move because of the many hours spent in sedentary screen time in order to meet the recommended 60 minutes of physical activity.

Marketing and Recruitment of Participants

The stakeholders that should be approached in the marketing campaign are the possible parents and children of the ECHO program. The parents as well as the children need to be approached for a few reasons. The parents are important stakeholders to approach because they will decide whether they allow their child to participate in the ECHO program. It is also important to approach the children because he or she will let the parents know whether he or she
wants to participate in the program. Other stakeholders that should be approached in the marketing campaign are the staff and employees at the YMCA. A letter of support from Carla Niese, Family Wellness coordinator, can be found in Appendix H, and a list of stakeholders contact information can be located in Appendix I. The staff must be aware that the program is available, as well as who to direct questions to about the program. The parents and or children will likely inquire about the program. The YMCA staff can be encouraged to suggest to members and non members that they get involved in the ECHO program. The local area school systems should also be approached in the marketing campaign. The local schools will be a valuable place to distribute marketing materials to. The school systems could be a place that will allow you to send home fliers and sign up sheets for the program.

The plan for cost-effective and attractive marketing materials is to have a simple, but eye catching one page brochure for the ECHO program. A brochure with more details about the program will also be available at the YMCA, a sample brochure can be found in Appendix J. A brochure at the YMCA will be available because brochures are available at the YMCA that details other programs that are available. The brochure includes a cover page with the ECHO acronym spelled out, which is Engaging Children in Healthy Occupations. The inside of the brochure has statistics on childhood obesity and explain why the ECHO program is important for children. The flier will give starting dates and times of the program for each age group, and a list of some of the fun and interactive healthy occupations that the children will be engaged in during the program. When giving the brochures out to the students at school, the occupational therapy professional running the ECHO program could spend five minutes with each classroom to explain some of the fun activities the program will entail, and ask the students to show their parents. A sign up sheet could also be sent home to children, and an example sign up sheet can
be found in Appendix K. The ECHO program facilitator will also need to make another trip back to the school to collect the sign up sheets. The facilitator will also need to have the cooperation of the teachers to help collect and keep the sign up sheets form their students.

Besides brochures and fliers about the ECHO program, the local newspaper could be used to help promote the program. The newspaper may be interested in writing a story about the Capstone experience, and information about the ECHO program would be included with the story. If writing a story about the ECHO program development plan is not possible, an advertisement in the sports or family section detailing information on the ECHO program could be requested. After the Capstone experience and the initial start of the ECHO program, a simple advertisement in the paper would be a continuous marketing strategy for the program.

Participants and Inclusion criteria

The pool of potential participants is children that are members as well as non members of the YMCA. The participants will range from ages preschool through sixth grade. The participants will commit to 1.5 hours one weekday a week, for 8 weeks.

The potential participating children can be of any weight classification, and do not need to have a weight problem to participate. Children must be willing to participate in occupations that are fitness based; nutrition based, as well as they must be willing to work on developing their psychosocial skills through occupation. The estimated number of children is twelve children for each paired age group. The children will be divided up by grade. Preschool and Kindergarten aged children will be a paired group and engage in the ECHO program on Mondays, and the total number of children from this paired group is twelve children. The first and second graders will also be a paired group of twelve total children and will be involved on Tuesdays, and so on. There will be a total of four groups, and groups will be held Monday through Thursday evenings. Friday evenings will be used for documentation and any other
miscellaneous paperwork needed to be completed for the program. The total estimated number of children that will be participating in the ECHO program is 48 children for each 8 week program session. Over the course of one calendar year, a total of four sessions will be run. An estimated total of 192 children will be involved in the ECHO program over the course of a school year. Table 1 below shows a sample of how children of each age group could be divided for the ECHO program. Table 2 below illustrates the estimated total number of children for one calendar year in the program.

<table>
<thead>
<tr>
<th>Day of the week</th>
<th>Age Group</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>Preschool (6) +/Kindergarten (6)=12</td>
<td>12</td>
</tr>
<tr>
<td>Tuesday</td>
<td>First (6)+ /Second Grade (6)=12</td>
<td>12</td>
</tr>
<tr>
<td>Wednesday</td>
<td>Third (6)+/Fourth Grade (6)=12</td>
<td>12</td>
</tr>
<tr>
<td>Thursday</td>
<td>Fifth (6)+/Sixth Grade (6)=12</td>
<td>12</td>
</tr>
<tr>
<td>Friday</td>
<td>Documentation Day</td>
<td></td>
</tr>
</tbody>
</table>

Total Number of children for an ECHO session  

| Total|=48

Table 2-Estimated number of children for one calendar year

(Four ECHO program sessions)

<table>
<thead>
<tr>
<th>ECHO Session #</th>
<th>Estimated Number of Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECHO Session 1</td>
<td>48</td>
</tr>
<tr>
<td>ECHO Session 2</td>
<td>48</td>
</tr>
<tr>
<td>ECHO Session 3</td>
<td>48</td>
</tr>
<tr>
<td>ECHO Session 4</td>
<td>48</td>
</tr>
</tbody>
</table>
Once the participants are in the program, data will be gathered according to several different demographic characteristics. First, the children will be identified by their age and gender. What school the child attends, other hobbies or interests, and other sports that the child may already be involved with will also be other information that will be gathered in the parent and child self report which can be found in Appendix G. Also, what food the child enjoys, as well as eating habits of the child and his or her family will be recorded in the self report found in Appendix G. The children's self esteem and psychosocial aspects will be explored and recorded as well. The children will also have their individual BMI rating computed and recorded at the beginning and end of the program, and the record sheet for this can be found in Appendix E.

The methods of participant recruitment will be at the YMCA and in the area schools. The participants will be recruited approximately four weeks before the next ECHO session program begins, and must be signed up two weeks prior to the beginning of a new session. The local schools will send a flier and sign up sheet home with the appropriate age groups (preschool through sixth grade). An example sign up sheet for the ECHO program can be found in Appendix K. The occupational therapy professional in charge of the ECHO program recruitment will periodically visit the schools to collect the sign up sheets and any fees for the ECHO program. Fliers and sign up sheets for the program will be available at the YMCA, as well as the database with participant information. A personal computer file used for the ECHO program will contain a spreadsheet, or database that will keep information on the number of children enrolled in the program. The database will be updated on a daily basis in order to keep a running tally of the number of participants for each age group. Contact information for each individual
will also be stored in the database, so information about the program can be sent out to the parents and children prior to the program start date.

**Programming**

The Engaging Children in Healthy Occupations, ECHO program will benefit by being run by an occupational therapist for several reasons. The occupational therapist will have clinical skills that other professional may not have. The therapist will understand the normal development of children, and will approach the ECHO program strategies from an intervention standpoint. The therapist understands that in order to make changes in the child, he or she must approach changing a child’s lifestyle and environment through intervention methods and mediums. The therapist will use intervention strategies including but not limited to engaging children in healthy occupations such as learning about healthy food choices, snack making, nature walks, and self awareness exercises. The American Occupational Therapy Association supports and promotes the involvement of occupational therapist in health promotion programs for children (Brownson & Scaffa, 2001).

The ECHO program will be an eight week program for children. The program will be held once a weekday, for one and a half hours for each paired age group. The separation of age group was shown in Table 1, located in the previous marketing and recruitment plan section. Each week will contain all three components that make up the ECHO program. The three components that make up the ECHO program are childhood physical fitness, nutrition, and psychosocial skills. The physical fitness component will account for approximately 30 to 60 minutes per weekly session, a nutrition component for approximately 15 to 30 minutes per weekly session, and psychosocial skills will be addressed for approximately 15 to 30 minutes per
weekly session. Each paired age group of children will meet for one and a half hours one day a week, over the course of eight weeks.

The ECHO program is based on three areas of daily occupation that affects a child and human beings health and well being. One area of daily occupation that is important to a child’s health is being physically fit, and a physical fitness component is one of the three components that the ECHO program will focus on. It is important that a child learn how to achieve and set goals towards improved or maintaining physical fitness by engaging in active and healthy occupations. The physical fitness component will emphasize occupationally embedded exercise, learning new sports activities, and actively learning the various components of exercise. The occupational therapist will also focus on helping the child develop gross and fine motor coordination through fitness based occupations. The nutrition component of the ECHO program, the second component of the program, will focus on childhood nutrition. The child will be encouraged to eat more fruits and vegetables, mindful eating (also psychosocial), portion control, how to read food labels, healthy food choices when eating out, and eating a balanced diet. The occupational therapist will also work on improving a child’s abilities to engage in meal and snack planning, food purchasing, food preparation, and healthy eating patterns. Eating and cooking are important Occupations of Daily Living (ODL’s), and healthy volition and habits in eating and cooking will be essential for the occupational therapist to address. The psychosocial aspect of the ECHO program is the third component that the program focuses and develops a child’s skills in. The psychosocial skills component of the ECHO program will encourage the child to have a positive body image, increase his or her self esteem, to have effective relationships with food and with others. The program will also explore how lifestyle and food starts in the home, and children and parents will be encouraged to make positive lifestyle
changes. The occupational therapist will help facilitate healthy fitness and nutrition occupations that will encourage children to develop positive psychosocial skills through these occupations. The occupational therapist will focus on how important a positive attitude, self-esteem, and body image are to improving one’s health and daily occupations.

Before beginning a week by week explanation of the ECHO program, a few points should be made. The ECHO program will be run after the school day hours (after approximately 3 pm), for approximately one and a half hours. The children will either be bused from the schools or the parents will arrange for after school transportation to the YMCA. The parents will also be responsible for arranging transportation for their child at the end of the program session. Another important point is that because children aged preschool through sixth grade will be participants in the program, the occupations that are detailed for the 8 weeks of the ECHO program will be graded up or down according to the children’s age group and developmental level. For example, the paired group of children that are preschool and kindergarten age may not be able to engage in a basketball occupation. Even though the fitness topic of the week may be basketball, the young children may only be able to go to the gym and begin to learn how to dribble and pass a basketball to one another. On the other hand, the experienced therapist would know how to grade up the occupation, and children that are fifth and sixth graders will likely be able to play a game of basketball, and will be able to shoot a basketball at the standard ten foot rim height. The occupational therapist understands how best to match the occupations with the developmental level of the children, and will also be focusing on important developmental skills such as gross motor coordination. The occupational therapist will recognize that younger children will need a basketball rim that will be lower and a more appropriate height for a young child. The occupational therapy professional understands not only that the child should engage
in healthy occupations, but that the child’s environment and developmental level are important factors to keep in mind throughout the planning and implementation of the ECHO program.

**ECHO Program Week One**

The first week of the program will involve assessments and an orientation to the ECHO program. The children will all have an individual file with each of their assessment information throughout the program. The children will also each be given a binder that they will need to bring each week that will contain copies of their assessment information and handouts throughout the program. Roll call for this session will be based on any child with an unclaimed binder, because the ECHO facilitator will have binders with all of the children’s names on them before session one of the programs. The ECHO facilitator will document any children that are not present at the first meeting, and will get in contact with them to find out whether or not they will be participating in the program.

Before the parents arrive, there will be an ice-breaker occupation for the children. This will give the therapist and children an opportunity to get to begin to know one another. After the ice breaker, the children will have the opportunity to eat a healthy snack, and will engage in a stretching and light fitness routine. The children will have the opportunity to tell the ECHO facilitator what their fitness and food interests are. The ECHO program facilitator will then record each child’s BMI information in a copy of Appendix E. The height and weight measurements will be completed and recorded in private or behind a curtain were other children can not see the results. After the BMI information is recorded, the occupational therapist and child will set six individualized goals that will be recorded in Appendix C. All of the goals will be individualized, measurable, and realistic for each child. In order to meet the ECHO program objective 2, three of the six goals will be set to be met by week 5 of the program.
Finally, after all of the children have their BMI information and goals recorded (Appendix E and Appendix F), the children will get a handout highlighting the upcoming fitness, nutrition, and psychosocial topics for week 2 through 8. The occupational therapist will explain to the children the importance of the three components, and why these three elements are all a part of a healthy lifestyle. If time allows, the children will be able to have open gym time or engage in an occupation of the group majority’s choice.

The next portion of session 1 is completing the self report (Appendix G). The self report will be completed by both the child and the parent. The parents will already have notified by phone that their child is enrolled in the ECHO program, and that they are expected to come and participate for approximately the last 30 minutes of the ECHO program’s week one and week eight sessions. The sign up sheet also notified the parents that they must attend week one and week eight of the program in order to complete the necessary assessments, and will also ask the parents to list any food allergies their child may have (Appendix K). The parents and children will get to learn about occupational therapy, and will learn about the profession and the ECHO program facilitator’s background. This time will also be used to orient the parents and children to the weekly session structure of the program, and will allow time for the parents and child to fill out the self report in Appendix G. The parents will be encouraged to play an active role in promoting engagement of their child in healthy occupations at home, and will be given home handouts on ways to incorporate healthier lifestyle habits and routines. The parents will be asked to make sure that their child comes to the ECHO program with proper workout clothing, shoes, and a water bottle. The parents and children will then have the opportunity to ask any questions or voice concerns that he or she may have about the program.
After the children have left, the occupational therapist will document the group time and record an overall report for the group session, an example of this data sheet can be found in Appendix L. On Friday of session 1, the ECHO facilitator will compute the children’s BMI, make copies of the BMI, goals, and self report for the parents and children to have, and complete the necessary documentation and preparation for the upcoming sessions of the ECHO program.

**ECHO Program Week Two**

The occupational therapist will begin the group with a role call for the children, and when she says the child’s name, he or she will respond with naming his or her favorite sport or fitness occupation. The second week of the program will consist of a snack at the beginning of the program, which will likely be right after the school day. This snack is at the beginning of the session so that it doesn’t disrupt a supper or evening meal that the child may have with his or her family at home. Before beginning any snack or food handling, the therapist will discuss proper sanitary food handling and safety precautions. The therapist will discuss hand washing before food preparation, and will discuss kitchen safety. This week’s nutrition topic and snack will be a fruit snack, and the nutritional component will discuss fruit and why it is an important component of a healthy person’s diet. The children will have the opportunity to actively engage in preparation of the fruit snack. Because eating and food preparation are important Activities of Daily Living (ADL’s) and Instrumental Activities of Daily Living (IADL’s), children need the opportunities to actively engage in these occupations. More importantly, a snack that a child prepares and understand the nutritional value of may have hold more meaning and purpose to the child because he or she has played an active role in the preparation. An example of a healthy fruit snack that the child will be able to prepare is apple slices with natural peanut butter. During the snack making occupation, the occupational therapist will emphasize the psychosocial skill of
turn taking and listening to directions and the therapist will also actively question and discuss the importance of fruits to our diet.

The next portion of the ECHO program is a physical fitness component that focuses on the importance of stretching. The children and ECHO facilitator will have an active discussion during the warm up and stretching exercises stating why stretching is important to our bodies. The children will also receive an age appropriate handout with pictures of different stretches for the Upper Body and Lower Body. After the warm up and stretching, the children will engage in a physical fitness based occupation that gets the children moving. The occupational therapist will give the children a few choices of different occupations that they can participate in, and the majority of the group will get to decide. The choices of occupations will vary depending on space availability of the facility, and the outdoor weather. An example of an occupation that could be completed outdoors if the weather permits is a nature hike or raking leaves. Fun, age appropriate music could also be played during the stretching and fitness occupation.

The last component of the week two sessions is the psychosocial skills section, and the topic that will be discussed amongst the group is setting and achieving goals. The children will be encouraged to visualize themselves achieving their goals, write down barriers to achieving their goals and how they can overcome them, and will be encouraged to set goals in other areas of their lives (e.g., chores, school, or sports). The children will also be encouraged to write their goals down, because it makes them more accountable and more likely to achieve them. The occupational therapist will teach the children that goals should be measurable, that goals can be short term and long term, and that goals should be realistic and the just right challenge. The children will have the opportunity to share their six goals that they set in session one of the program. This session will conclude with a summary of the topics for the week (fruit, stretching,
and goals). The children will also be given two copies of their BMI information, self report, and goals that was completed in week one of the program. One copy will be for the parents to have, and another copy will be for the children to keep in their ECHO program folders. Along with the assessments, the children will be given a manila envelope for the parents, which will have a copy of their child’s BMI status, what it means, and healthy suggestions. Also included in the envelope will be a copy of the self-report (Appendix G) and the goals (Appendix F). The children and parents will be encouraged to discuss the child’s goals and assessment information. After the children leave, the occupational therapist will spend some time documenting the group, amount of time spent on each occupation, and any other information about the program that the therapist may need to document.

On Friday of session two of the ECHO program, the occupational therapist will finish any documentation for the week, and prepare for the upcoming week. The therapist will make a list of needed items for the next week and make any copies that will be used as handouts for the upcoming week.

_ECHO Program Week Three_

To start the week three session of the ECHO program, the occupational therapist will ask the child to name his or her favorite animal when his or her name is called. The snack and nutrition component will focus on vegetables. Again, why this food group is important to human health will be discussed, and a vegetable snack will be made and shared amongst the children. An example of a vegetable snack that the children could prepare is celery and carrots with peanut butter. The occupational therapist will keep in mind and will be aware at all times of any food allergies that the children may have.
The physical fitness component will focus on aerobic and cardiovascular physical fitness, and why this type of fitness and occupations are important. The children will have a warm up and stretching time, and then will engage in an occupation such as “Simon says”. The children will take turns playing the game, and therapist will be Simon. The therapist will focus on the children following directions, and will get the children’s cardiovascular system going by asking the children to do jumping jacks and run in place. The therapist will focus on occupations that are appropriate for the children’s development and ability level. The occupational therapist will be aware of the children’s gross motor ability, and will grade the “Simon says” occupation accordingly.

The psychosocial topic that will be addressed is healthy habits. According to the Model of Human Occupation, habits are learned through repetition of behavior, and they often guide automatic behavior (Bruce & Borg, 2002). A person’s habits generally are stable throughout his or her life, therefore it is very important to develop healthy habits in young children in order to promote a lifetime of health (Bruce & Borg, 2002). The occupational therapist will discuss healthy eating, fitness, and psychosocial habits. The children will be encouraged to have healthy habits, and how to change an unhealthy habit into a healthy one will also be discussed. One example of a healthy habit that the therapist can encourage is to promote the children to eat their snacks on a plate, rather than out of a box or container. The children will know exactly how much they are eating, and will not be as likely to eat an entire bag of chips at once. After the children are all gone, the occupational therapist will spend time documenting the group and anything else that may be notable for the day.

On Friday of this week, the therapist will also have time to complete documentation and prepare materials and supplies for the upcoming week of the ECHO program. The therapist may
also prepare a letter to the parents of the children that inform the parents about how the program is going and what occupations and topics the children have been involved in.

_ECHO program Week Four_

This week is considered the midpoint of the program. The sessions for week four will begin with role call, and the child will name his or her favorite color when his or her name is called. The nutrition topic of this week’s session will be the dairy and milk product food group. The benefits and sources of dairy and milk products will be discussed. The occupational therapist will focus on snack making with a dairy or milk product. Once again, the therapist will be aware of any food allergies that any of the children may have. The dairy or milk snack that the children will make could be a yogurt parfait with fruit or cheese and crackers. The children will be working on an IADL because they will be preparing a snack, and this is an important skill and occupation for any child to learn and develop. After the children have finished preparing and eating their snack, they will also help clean up the tables and any other kitchen supplies that may be dirty. Cleaning up and putting away kitchen materials is also another important IADL that the therapist will focus on the children developing. While the children eat and clean up, the therapist will call aside each child to review the goals set in week one of the program (Appendix F). The child and occupational therapist will discuss each goal, and whether he or she has yet met his or her goal. The therapist will make comments and give suggestions to the child’s progress and goals. The status of the goals, and comments and suggestions for the goals will be recorded on a copy of the goal sheet in Appendix F.

The fitness topic of this week’s session is strength and endurance. The children will begin the fitness portion of group by engaging in a warm up and stretching. The children will then begin following the leader to do various strengthening and endurance exercises. Exercises
that the therapist will teach and instruct the children on include sit-ups, push ups, calf raises, arm circles, and many others. The types of exercises and number of repetitions will be up to the therapist discretion, because he or she will be knowledgeable about the abilities and developmental levels of the children. Information on the importance of strength and endurance occupations will be provided and discusses throughout the strengthening and endurance exercises. The therapist will emphasize proper body mechanics, and will also discuss wearing a back pack correctly. The therapist will discuss how because of the strength needed to carry a backpack, it is important to wear a backpack correctly.

The psychosocial aspect of the program will discuss roles. A person’s roles are important because they are a person’s awareness of a certain social identity and related obligations that provide a framework for constructing the behavior viewed as appropriate in various situations (Bruce & Borg, 2002). Again, it is very important to help a child identify habits (which were discussed in week three) and roles, because eating patterns generally remain stable throughout a person’s life (Bruce & Borg, 2002). What roles the child has in the home and at school will be discussed. The therapist will help raise the children’s self awareness about their roles, and will talk about ways that they can be positive and healthy in their roles at school and at home. The therapist will document the session and any notable occurrences for the group.

On Friday of this week, again the therapist will document and continue to prepare for the upcoming weeks of the program. The therapist will prepare copies of the goal sheet midterm evaluation (Appendix F) for each child’s parents. The therapist will give the children a copy of the midterm goal evaluation (Appendix F) in week six to give to their parents.
**ECHO Program Week Five**

The session will begin with role call, and the child will be asked to name his or her favorite fruit when he or she is called upon. The snack and nutrition topic of this week is carbohydrates. Again, focus on daily carbohydrate servings, and why this food group is important to a child will be discussed. The children will get to make a snack that is part of the carbohydrate food group, and may make a snack such as chex mix or a trail mix.

The children will then begin the physical fitness portion of the program. The children and therapist will begin with a warm up and then stretch. The children will also engage in some strength and endurance exercises such as sit ups and push ups. The therapist will also emphasize balance and coordination. The children will practice standing on one leg and coordinating their movements. The therapist will be able to observe the children’s gross and fine motor coordination throughout the occupations. The children will then be given two or three choices of fitness activities, and the group will get to vote on what they would like to participate in. Choices that the children may be given are tag and volleyball. The occupational therapist will emphasize following directions team work.

The psychosocial topic is thinking about being healthy for a lifetime. The occupational therapist will encourage the children to continue to develop healthy habits and roles, and to think of being healthy as a way of living. The occupational therapist will emphasize that exercising and moving should be fun and enjoyable, and not a luxury. The therapist will talk about exercise as a part of your day, and should be incorporated into your day as much and as often as possible. The therapist will give suggestions on incorporating extra little amount of exercise into a person’s day. The children will be encouraged to ride their bikes to play with friends or to walk home from school whenever possible. The children will be encouraged to think of eating healthy
and incorporating healthy portions of each food group as a habit and routine they will always do, not just a temporary practice. At the end of the session, the therapist may document the relevant information for the group.

On Friday of this week, the therapist will also make copies and document any necessary information. The therapist will also spend this time preparing any necessary materials for the next week of the program.

_ECHO Program Week Six_

To begin week six of the ECHO program, the child will complete the role call by responding when his or her name is called by stating one thing that he or she is good at. The occupational therapist should be looking to constantly increase the child’s self awareness. This is important because the children will realize that he or she has volition or personal causation (Bruce & Borg, 2002). It is important to help a child realize that he or she is ultimately the one who determines his or her future, and the therapist can help do this by increasing the child’s self awareness.

The protein snack will emphasize different sources of protein and explain how this food group is important to the child’s nutritional intake. The children will have the opportunity to either prepare a protein based snack or cook a small snack with a protein component (depending on age and developmental level of each paired age group). A snack that the children may prepare could be slicing turkey and cheese with whole grain crackers. The children again will have the opportunity to learn about protein, and the therapist will be facilitating the development of cooking and meal preparation (IADL’s) in order to have a child engaged in health eating (ADL).
For the physical fitness occupation, the children will have the opportunity to walk to the local grocery store and learn about grocery shopping (weather permitting). This will be an occupationally embedded exercise that also focuses on developing a child’s IADL skills. Preparing and planning a meal are important IADL skills for any person to have. The children will have the opportunity to explore the grocery store and will need to locate one healthy food from each food group, and write down what the food is. The children will walk back to the YMCA after the grocery store outing, and will discuss with the group what he or she bought and what food group(s) his or her item is in.

The psychosocial component focuses on helping a child eat only until he or she is comfortably full, and not “stuffing” himself or herself with food. A picture depicting when a child is very hungry, comfortably full, and uncomfortably full will be used. Being comfortably full, rather than uncomfortably full and overeating will be emphasized and discussed. Again, the therapist will be working on raising a child’s self awareness and metacognition, which are important skills for children to have. These skills will help a child understand that he or she is an individual and has control over how much he or she may eat. At the end of the session, the occupational therapist can document the group occupations and participation.

On Friday of this week, the therapist again will finish any documentation from the week. The therapist will prepare for the upcoming program week. The ECHO program facilitator will also make any necessary copies or complete necessary tasks to keep the program running smoothly.

ECHO Program Week Seven

Week seven of ECHO program will begin by having the child name his or her favorite chore when his or her name is called. The food guide pyramid and portions will be the
nutritional topic for this week. The children will have a healthy snack, and will be introduced to the entire food guide pyramid. Up to this point, the children have been introduced to the five food groups that make up the food guide pyramid. The five food groups that the children have learned about are fruits, vegetable, milk/dairy, carbohydrates, and protein. The therapist will talk about fats, oils, and sugars, and why this portion of the food guide pyramid should be eaten sparingly. The children will make a healthy snack, and a snack that they may make could be a fruit salad or vegetable salad. The occupational therapist will best be able to help plan the snack because he or she will know how well the children will be able to carry out all the steps of making a snack (IADL).

After the children have cleaned up and are finished with the nutrition portion of the ECHO program, the group will warm up and stretch out. Next, the children will be introduced to the fitness occupation for the week. The fitness occupation will be a basketball based routine. The occupational therapist will grade the basketball routine according to the group’s development and gross and fine motor ability. The children will need to following directions and will practice turn taking and team work, which are important social skills for children. A game that the children may play is knock out or a passing game. This will help develop the child’s judgment and hand eye coordination. The occupational therapist will encourage the children to try new sports, and to continue to play and try out the new sports with their friends.

The psychosocial skill that will be addressed and discussed will be self esteem and body image. It is important that the children learn that a good self-esteem and body image are an important aspect of being healthy. The children will write down occupations that make them feel good, and how they feel about their bodies. The occupational therapist may document the group
and the interactions once the children have left the YMCA. Friday will also be a day that the therapist can document and prepare for the upcoming weeks of the ECHO program.

*ECHO Program Week Eight*

This is the final week of the ECHO program, and the session will end with the final BMI record (Appendix E), goal sheet (Appendix F), and self report (Appendix G). Role call for the week will have the child name his or her favorite season when he or she is called on. The nutrition topic of the week is eating out and beverages. The therapist will talk about limiting unhealthy beverages such as pop and sweetened fruit drinks, and to drink moderate amounts of natural fruit juices and milk. The children will learn about healthy options when eating out, and will be encouraged to learn to cook or have meals in the home. Moderating fast food and eating out will be emphasized. It is important to discuss eating out and healthy options when eating out because Americans spend nearly half of their food budget eating out (Young, 2007). It is unrealistic to think that children and their families will never eat out, but instead it is important to teach them healthy options when eating out. The children and the occupational therapist will make a healthy snack that the children and parents will enjoy together when the parents arrive. The children may help prepare a fruit and vegetable tray. This will take approximately an hour and fifteen minutes for the BMI, goals, and snack preparation.

The fitness occupation that will be addressed for the week is football. The children will learn about the sport, and will engage in a football based game. The occupational therapist will be focused on developing the child’s interest in new occupations, as well as physical skills like catching, which involves hand-eye coordination. This is an important skill to develop because it will help children be better at all occupations if they feel coordinated and confident in themselves.
The psychosocial component that will be addressed is playing with others. The children will be asked to identify problems he or she may have playing with others, as well as ways to overcome problems he or she has had playing with others. If it is appropriate for age group of children participating, he or she will be able to role play effectively playing and communicating with others. The children will have the chance to play a game with others, and will be asked to think about how to appropriately play with others during the game. A game that the children could play is musical chairs. The occupational therapist will invite the children and parents to eat the snack, and the occupational therapist will close with remarks. The occupational therapist will tell the parents that a copy of the final results of the child’s BMI, goals, and self report will be mailed home in about a week. The occupational therapist will emphasize concentrating on healthy eating and exercise patterns, rather than focusing on numbers and weight. The children and parents will have the opportunity to discuss healthy lifestyle habits and changes that their children or family has made throughout the program. The children will be encouraged to get involved in the ECHO program in the future, because the occupations will be graded up and changed according to the group of children’s development. The occupational therapist will offer his or her phone number and email as a way to reach him or her to answer any questions or for suggestions.

The occupational therapist can complete his or her documentation at the end of the session, and can also complete documentation on Friday. The therapist will also prepare and complete necessary tasks on Friday of this week.

*Occupational Therapy Model of Practice*

The model of practice that the ECHO program will be based on is the Model of Human Occupation (MOHO) developed by Gary Kielhofner (Bruce & Borg, 2002). This model will be
the framework that the ECHO program will consist of. This model is a system’s perspective of
the person, focusing on the constant interaction of person, task, and environment. The model
views occupational therapy as a profession that helps a person to engage in occupational
behavior that will enable him or her to live meaningful life roles (Bruce & Borg, 2002). In
clinical practice, the model has been a framework for programs in the community, and has been
used for interventions with the non-mental health pediatric population (Bruce & Borg, 2002).
Studies using MOHO as a model to evaluate and look at a patient have found that a person with
occupational dysfunction shows problems with daily function, self-esteem, sense of control, role
behavior, and everyday habits (Bruce & Borg, 2002). The ECHO program addresses self-esteem
and role behavior, which are important psychosocial components that affect a child’s everyday
occupational performance. Healthy habits and roles will also be discussed and are an important
aspect of healthy occupational engagement.

The Model of Human Occupation views a person as an open system that consists of three
subsystems that work together. The first system is the volition subsystem. This system
determines the person’s occupational behavior. The second system organizes occupational
behavior into patterns or routines, and is known as the habituation subsystem. The final
subsystem is the mind-brain-body performance subsystem. The mind-brain-body performance
subsystem is important because it makes skilled achievement of occupations possible (Bruce &
Borg, 2002).

The volitional system involves a person’s personal causation, values, and interests (Bruce
& Borg, 2002). Personal causation is a person’s self-efficacy in occupations. The ECHO
program will help the child improve confidence and self-esteem, and therefore will increase his
or her level of personal causation. A belief of the Model of Human Occupation is that all people
have a certain level of value and conviction, and will assign significance to highly valued occupations (Bruce & Borg, 2002). Also, MOHO views interests as a component of volition, and they are defined as enjoyment in an occupation (Bruce & Borg, 2002). The ECHO program will have sessions that allow the children to choose occupations that are valued and of interest to the group, and again aims to increase the level of volition that the participating children have.

The next subsystem of the MOHO system is known as the habituation subsystem. This system is composed of habits and roles (Bruce & Borg, 2002). Habits are learned through repetition of behavior and they tend to guide human automatic behavior (Bruce & Borg, 2002). Roles are another component of the habituation subsystem, and it is the awareness of a certain social identity and related obligations that provide a framework for constructing the behavior viewed as appropriate in various situations (Bruce & Borg, 2002). It is important to help a child learn positive habits and roles, because eating patterns generally remain stable throughout a person’s life (Bruce & Borg, 2002). The ECHO program will help a child identify habits and roles that he or she has related to eating, fitness, and psychosocial skills. In order to help a child embrace and develop healthy lifestyle habits and roles, it is essential to start young so that the stable habits and roles throughout his or her life are healthy.

The last subsystem of MOHO is called the mind-brain-body performance. This subsystem is made up of what we have to perform with (Bruce & Borg, 2002). Four categories make up a person’s mind-brain-body performance subsystem, and these are the musculoskeletal system, neurological system, cardiopulmonary system, and the symbolic system (Bruce & Borg, 2002). The symbolic system is images that guide a person in his or performance of occupational behavior (Bruce & Borg, 2002). It is essential to help a child learn about his or her body, and how important it is to take care of the mind-brain-body performance subsystem. The ECHO
program will not only address taking care of one’s body, but the psychosocial skills addressed will focus on how important a healthy mind is to overall health.

Assessments

In order to measure the effectiveness of the program, you must be able to have measurable outcomes. The body mass index (BMI) is an assessment that can be used to look at a children's height and weight index. The BMI can assess whether a child is underweight (BMI of 18.5<), normal weight (BMI of 18.5-24.9), overweight (BMI of 25.0-29.0), or obese (BMI of 30 or greater). The Center for Disease and Control Prevention has an online BMI calculator for children and teens. The child's birthdate, measurement date, height, weight, and gender are all entered into the website. The website calculates the child's weight percentile for his or her age, and then states the child's BMI weight classification. Appendix E is an example of the BMI information that will be collected on each child during week one and again in week eight of the ECHO program.

The children and ECHO program facilitator will also be responsible for goal setting. Together, the child and therapist will record a total of six goals during week one of the program. Two goals will be focused on a nutritional aspect of the child’s life. Two more goals will deal with a physical fitness goal that the child may have for himself or herself. Finally, two more goals will be focused on developing psychosocial skills such as self-esteem, body-image, and play skills. The children and therapist will go over the goals again at the midpoint of the program, which is week four, and the therapist will record the progress of the goals. The goals will be discussed and assessed again at the conclusion of the program in week eight. The goals for each individual child will be recorded on a copy of the goal sheet in Appendix F.
Finally, each child and parent together will complete the self report (Appendix G). The self-report assessment will be completed during week one and week eight of the ECHO program. The self report assesses a child’s average nutritional intake, physical fitness level, and psychosocial skill level.

Occupational forms that will be used for the ECHO program is food and healthy snacks, to help the children actively learn about proper nutrition. The children will also get handouts and tip sheets that he or she can bring home and discuss with his or her parents. The children will have the opportunity to engage in healthy, fitness promoting occupations. Various sport equipment, and the YMCA facility will be important occupational forms used for the fitness component of the ECHO program. The psychosocial skills that will be addressed will use worksheets and discussion groups as the occupational forms to address psychosocial skills. A worksheet that helps a child identify how he or she feels about his or her body is one example of a form during the ECHO program.

Direct services that will be provided are based from an occupational therapy and Model of Human Occupation approach. The child will be able to set individualized goals with the guidance of the ECHO facilitator. Other direct services will be nutrition information, BMI assessment, facilitation of physical fitness occupations, and psychosocial skill development. The ECHO program participants will also be given suggestions on how to improve their habits, and the parents will be given tips and information on promoting a healthier lifestyle for their child. The ECHO program facilitator will also be available during working hours to answer any questions that a child or parent may have. The facilitator will also be available to previous program participants and parents to answer questions or give suggestions.
The sequence of the program will be a total of four ECHO program sessions a year. The program will be 8 weeks long, and will have break after each 8 week session. The weeks off between sessions will allow ample time for the program facilitator to prepare materials for the next ECHO program session, send information out to upcoming participants, and make any changes to the program that are necessary.

The participants will be discharged from the program at the end of the eight week program. The child can participate in the program again when he or she reaches the next grade level, because all of the occupations in the ECHO program will be graded up or down based on the children’s age and developmental level.

Budgeting and Staffing

Budgeting

The following budget is an estimated detailed expense plan for the first year of the Engaging Children in Healthy Occupations program.

Staffing

<table>
<thead>
<tr>
<th>Position</th>
<th>Hours Per Week</th>
<th>Salary</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational Therapist</td>
<td>15</td>
<td>$21,750</td>
<td>$21,750</td>
</tr>
</tbody>
</table>

Total $21,750

The Engaging Children in Health Occupations program will be run by an occupational therapist. The employment for the position will be part time (approximately 15 hours). A plan to determine an estimate of the number of hours and tasks that will occur over the course of one week was made for the duration of the eight week program and for breaks between programs (Appendix M). The tasks for the 8 week ECHO program session include preparatory tasks, the ECHO program, and documentation and clean up tasks. The salary estimates for the occupational therapist was computed using www.salary.com for Ottawa, OH. The position is
open to an occupational therapist with a minimum of a master’s degree and two years of pediatric experience. A description of the occupational therapist job description (Appendix N) and an advertisement (Appendix O) show that the most important characteristics for the occupational therapist to possess is a love for working with children and promoting healthy lifestyles.

*Computer Items*

<table>
<thead>
<tr>
<th>Item</th>
<th>Justification</th>
<th>Quantity</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Desktop Computer</strong></td>
<td><strong>Dell Optiplex 755</strong>&lt;br&gt;www.dell.com</td>
<td>1</td>
<td>$679</td>
</tr>
<tr>
<td>A desktop computer is needed to access the internet for the BMI Calculator in the CDC’s website, to update number of ECHO participants, to prepare marketing materials and handouts for children and parents.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>$679</td>
</tr>
</tbody>
</table>

*Office Items*

<table>
<thead>
<tr>
<th>Item</th>
<th>Justification</th>
<th>Quantity</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Colored Office Paper</strong></td>
<td>The colored office paper is necessary for marketing items such as fliers, brochures, and other items distributed for the ECHO program. Items will be distributed at the YMCA and in the local area schools.</td>
<td>1</td>
<td>$25</td>
</tr>
<tr>
<td><a href="http://www.officedepot.com">www.officedepot.com</a></td>
<td><strong>Unit cost-$25</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>White Office paper</strong></td>
<td>White office paper is necessary for</td>
<td>3</td>
<td>$57</td>
</tr>
<tr>
<td><a href="http://www.officedepot.com">www.officedepot.com</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
<td>Quantity</td>
<td>Unit Cost</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------</td>
<td>-----------</td>
</tr>
<tr>
<td>Three Ring Binders</td>
<td>The binders will allow the occupational therapist to prepare copies of the assessments, a week by week plan of the program, and a section for notes to document the ECHO program. The OT will use a different binder for each paired age group, therefore will have a total of four binders for each ten week ECHO session. The occupational therapist can reuse the binders for each session.</td>
<td>4</td>
<td>$32</td>
</tr>
<tr>
<td>Ballpoint Pens</td>
<td>For note-taking, assessment, and documentation purposes.</td>
<td>1</td>
<td>$9</td>
</tr>
<tr>
<td>Stapler</td>
<td>For maintaining handouts and documentation records of the ECHO program.</td>
<td>1</td>
<td>$15</td>
</tr>
<tr>
<td>Staples</td>
<td>For maintaining handouts and documentation records of the ECHO program.</td>
<td>1</td>
<td>$5</td>
</tr>
<tr>
<td>Hanging File Folders</td>
<td>The hanging file</td>
<td>5</td>
<td>$55</td>
</tr>
</tbody>
</table>
folders will be used to maintain and organize documentation records in the filing cabinet.

*Unit cost-$11*

<table>
<thead>
<tr>
<th>Item</th>
<th>Justification</th>
<th>Quantity</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Round Ring View Binders, 1” Rings, Black, Pack Of 2</td>
<td>The black binders will be given to the ECHO program participants, and they will keep copies of their BMI, self-report, handouts, etc…</td>
<td>98</td>
<td>$351.82</td>
</tr>
</tbody>
</table>

*Unit cost-$3.59 pack of 2*

Total = $549.82

Other ECHO Program Equipment and Supplies

<table>
<thead>
<tr>
<th>Item</th>
<th>Justification</th>
<th>Quantity</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food, napkins, cooking ingredients, and supplies.</td>
<td>These items are necessary in order to teach children how to prepare and carry out meals and snacks. The best way to teach about healthy snack and meal preparation is by actually doing it! Supplies such as fresh fruits and vegetables, cooking spray, napkins, spices, and other cooking and snack materials are needed in order to learn the important task of healthy cooking and meal preparation.</td>
<td>32 weeks x $100.00 a week= $3,200.00</td>
<td>$3,200</td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
<td>Quantity</td>
<td>Cost</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>----------</td>
<td>-------</td>
</tr>
<tr>
<td>30” Freestanding Electric Convection Range</td>
<td>Children will need to learn kitchen safety, and light meal planning and preparing. The oven and stove top will allow the children to do hands on cooking and meal planning.</td>
<td>1</td>
<td>$1,900</td>
</tr>
<tr>
<td><a href="http://products.geappliances.com">http://products.geappliances.com</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microwave</td>
<td>This will be used for any kitchen snack or meal making.</td>
<td>1</td>
<td>$70</td>
</tr>
<tr>
<td><a href="http://www.bestbuy.com">www.bestbuy.com</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Three Stainless Steel Kitchen Mixing Bowls with lids</td>
<td>This will be used for any kitchen snack or meal making.</td>
<td>2</td>
<td>$60</td>
</tr>
<tr>
<td><a href="http://www.target.com">www.target.com</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knife set</td>
<td>This will be used for any kitchen snack or meal making.</td>
<td>1</td>
<td>$70</td>
</tr>
<tr>
<td><a href="http://www.target.com">www.target.com</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pyrex Prepware 13 pc. Set</td>
<td>This item will be used to help measure and prepare snacks and meals. All of your measuring needs and preparation materials are in this set.</td>
<td>1</td>
<td>$30</td>
</tr>
<tr>
<td><a href="http://www.target.com">www.target.com</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 pc. Dinnerware set</td>
<td>The set includes four dinner plates, four salad plates, four bowls, and four mugs. This will be used to help children learn to set a table and clean</td>
<td>3</td>
<td>$75</td>
</tr>
<tr>
<td><a href="http://www.target.com">www.target.com</a></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Justification</td>
<td>Quantity</td>
<td>Total Cost</td>
</tr>
<tr>
<td>---------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>----------</td>
<td>------------</td>
</tr>
<tr>
<td>Sunbeam heritage hand mixer <a href="http://www.target.com">www.target.com</a></td>
<td>This will be used to help mix and prepare snacks and meals.</td>
<td>1</td>
<td>$30</td>
</tr>
<tr>
<td>Unit cost-$25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kitchenmaid Manual Can opener <a href="http://www.target.com">www.target.com</a></td>
<td>This item will be used to help prepare snacks and meals.</td>
<td>2</td>
<td>$20</td>
</tr>
<tr>
<td>Unit cost-$30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oster electric can opener <a href="http://www.target.com">www.target.com</a></td>
<td>This will be used to help prepare snacks and meals.</td>
<td>1</td>
<td>$15</td>
</tr>
<tr>
<td>Unit cost-$10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Big Book of Recipes for Babies, Toddlers &amp; Children: 365 Quick, Easy, and Healthy Dishes <a href="http://www.target.com">www.target.com</a></td>
<td>This book will be used to help prepare snacks and meals for the children.</td>
<td>1</td>
<td>$14</td>
</tr>
<tr>
<td>Unit cost-$15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jobar Handy Gourmet Anti-Bacterial Food Containers 20-pc. Set <a href="http://www.target.com">www.target.com</a></td>
<td>This will be used for snack and meal preparation. This item will be used for food storage.</td>
<td>1</td>
<td>$13</td>
</tr>
<tr>
<td>Unit cost-$13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>$5,497</strong></td>
</tr>
</tbody>
</table>

**Miscellaneous Items**

<table>
<thead>
<tr>
<th>Item</th>
<th>Justification</th>
<th>Quantity</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel Expenses Federal Mileage reimbursement For no government owned vehicle <a href="http://www.gsa.gov">www.gsa.gov</a></td>
<td>The travel expenses are necessary to cover travel costs of trips to/from area schools for marketing and recruitment of program participants.</td>
<td>$0.55 a mile As of January 1, 2009 2, 727.27 x$0.55/mile= $1,500</td>
<td>$1,500</td>
</tr>
<tr>
<td>Day Planner <a href="http://www.walmart.com">www.walmart.com</a></td>
<td>This will be used to schedule and plan tasks and appointments.</td>
<td>1</td>
<td>$25</td>
</tr>
<tr>
<td>Unit cost-$25</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Business Cards

The business cards will be used to distribute to children, school teachers, school administrators, area businesses, and parents.

*Unit cost*-$15 per 200 business cards a pack

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Business Cards</strong></td>
<td></td>
<td>2</td>
<td>$30</td>
</tr>
</tbody>
</table>

### Newspaper advertisement

This will be used to help market and promote the ECHO program to area parents and children. The advertisement will be placed in the paper during the three week breaks between the ECHO program sessions. Therefore, because there are 4 ECHO sessions a year, 4 programs x 3 week breaks = 12 weeks of advertisement.

*Unit cost*-$25 a week

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Newspaper advertisement</strong></td>
<td></td>
<td>12</td>
<td>$300</td>
</tr>
</tbody>
</table>

**Total** $1,855

### In-Kind Support

Items that will be provided by the Putnam YMCA are considered in-kind support, and include: office space, desk, chair, cabinet with locks, personal phone, voicemail for personal phone, bulletin board space, ECHO program classroom space, gym space, gym and sports equipment, scale for BMI height and weight measurements, refrigerator for food storage, computer usage and file support access, printer/copier (color and grayscale) usage, internet access, and support through program staff.

### Indirect Costs
The Putnam County YMCA will be reimbursed for indirect costs of the ECHO program including heat, air conditioning, electricity, and bathroom facilities. The indirect costs for the program are 25% of the programs subtotal.

**Total Costs**

<table>
<thead>
<tr>
<th>Expense Areas</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Staffing</strong></td>
<td>$21,750</td>
</tr>
<tr>
<td><strong>Computer Equipment</strong></td>
<td>$679</td>
</tr>
<tr>
<td><strong>Office Items</strong></td>
<td>$549.82</td>
</tr>
<tr>
<td><strong>Other ECHO Program Equipment and Supplies</strong></td>
<td>$5,497</td>
</tr>
<tr>
<td><strong>Miscellaneous Items</strong></td>
<td>$1,855</td>
</tr>
<tr>
<td><strong>In-Kind Support</strong></td>
<td>$0</td>
</tr>
<tr>
<td><strong>ECHO Program Subtotal</strong></td>
<td>$30,330.82</td>
</tr>
<tr>
<td><strong>Indirect Costs</strong></td>
<td>$7,582.70</td>
</tr>
<tr>
<td><strong>Total Program Cost</strong></td>
<td>$37,913.52</td>
</tr>
</tbody>
</table>

**Funding Sources**

In order for the ECHO program to run for the first year, a way to fund the program must be planned. Three potential funding sources are found that are an appropriate fit to the ECHO program. The three possible funding sources are: The Carol M. White Physical Education Program, National Institutes of Health Grant program for Childhood obesity program and
research, and The Department of Health and Human Services grant for improving diet and physical activity assessment.

The first possible funding source for the ECHO program is the Carol M. White Physical Education Program grant. Eligible applicants are local educational agencies (LEAs), including charter schools that are considered LEAs under state law, and community-based organizations (CBOs), including faith-based organizations.

To receive Physical Education Program grant funding, a physical education program must provide one or more of the following:

1) Fitness education and assessment to help students understand, improve, or maintain their physical well-being;

2) Instruction in a variety of motor skills and physical activities designed to enhance the physical, mental, and social or emotional development of every student;

3) Development of, and instruction in, cognitive concepts about motor skills and physical fitness that support a lifelong healthy lifestyle;

4) Opportunities to develop positive social and cooperative skills through physical activity participation;

5) Instruction in healthy eating habits and good nutrition; and

6) Opportunities for professional development for teachers of physical education to stay abreast of the latest research, issues, and trends in the field of physical education.

The ECHO program will address at least numbers 3, 4, and 5; therefore the program is very appropriate for meeting the objectives that this grant seeks a program to meet. The program goal aims to improve a child's cognitive awareness concerning motor skills and physical fitness. The ECHO program will also include a physical activity component that will aim to improve a
child's physical fitness as well as encourage positive social skills. Finally, the ECHO program will address what good eating habits and nutrition entail. The ECHO program clearly addresses and will meet the Carol M. White Physical Education grant goals.

The second funding source is National Institutes of Health Grant program for Childhood obesity program and research. Eligible applicants include: state and local government agencies, non-for profit businesses, and private institutions of higher education. The Putnam County YMCA is eligible because it is a non-for profit faith-based organization. The budget and project period for this grant includes direct costs of up to $50,000 per year and a project duration of up to two years may be requested for a maximum of $100,000 direct costs over a two-year project period. The closing date for applications is May 7th, 2012. In order to complete this grant, you must include the following in the grant application: cover, project/performance site locations, other project information, senior/key person profile(s), budget, subaward budget attachment form, cover letter, cover page supplement, modular budget, program plan, and checklist. Page limits, how to submit the form, and content criteria are all thoroughly outlined in the grant form guide, which was downloaded from the www.grants.gov website. The www.Grants.gov website contact information is telephone: 1-800-518-4726 or email: support@grants.gov.

The final funding source is through the Department of Health and Human Services, and is an improving diet and physical activity assessment grant. The executive summary of this grant explains Diet and physical activity as lifestyle and behavioral factors that play a role in the etiology and prevention of many chronic diseases such as cancer and coronary heart disease. Both also play roles in preventing overweight/obesity and in maintaining weight loss. Therefore, diet and physical activity are assessed for both observation and epidemiologic/clinical research purposes. The measurement of usual dietary intake or physical
activity over varying time periods or in the past, by necessity, has relied on self-report instruments. Such subjective reporting instruments are cognitively difficult for respondents, and are prone to considerable measurement errors that may vary among population subgroups and depend on the time frame considered and the characteristics of the respondents. The primary goal of this FOA issued by the National Cancer Institute (NCI), National Heart, Lung, and Blood Institute (NHLBI), National Institute on Aging (NIA), National Institute of Child Health and Human Development (NICHD), National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), National Institute of Mental Health (NIMH), National Institute of Nursing Research (NINR), and National Institutes of Health (NIH) Office of the Director (OD) Office of Dietary Supplements (ODS) is to promoting innovative research to enhance the quality of measurements of dietary intake and physical activity. Applications may include development of: novel assessment approaches; better methods to evaluate instruments; assessment tools for culturally diverse populations; across various age-groups including older adults; improved technology or applications of existing technology; or statistical methods to assess or correct for measurement errors or biases.

Another possible funding source that may be used is the Putnam County Education Service Center (ESC). Meetings and discussions with Kathy Hartman, Grant writer, took place in April, 2009. Possibilities of running the ECHO program and its principles throughout the Putnam County area have been discussed. The Putnam County ESC has collaborated in the past with the Putnam County YMCA for programs such as “My Time”. This program serves school districts that fit a lower socioeconomic status, and is a program that helps get children active and involved during the after school hours.
Self-Sufficiency Plan

For the first year of the ECHO program, grant monies will need to be used in order to prove the program’s effectiveness and quality. For future years to come, other ways of funding the program must be planned and discussed. Once the ECHO program has made it successfully through its first year, the Putnam County YMCA will be able to cover the majority of the costs for program maintenance.

In order to determine how the ECHO program will survive beyond the first year, several factors come into play. Additional funding will be necessary in the first year of the program, because the program needs to build a positive reputation and be deemed valuable. After the occupational therapist has run the ECHO program for one year, he or she will likely be spending less time in several key areas of the program. The therapist will not be spending as much time planning day to day tasks and activities for the program. It is also anticipated that he or she will also not be spending as much time marketing and recruiting participants because of the reputation the program has built. Also, after a year of the program, hopefully word of mouth advertisement will account for a lessened need for marketing and recruitment. This change will decrease the amount of money that is required for the occupational therapist salary. The Putnam County YMCA will also charge a program fee for members and nonmembers in order to defray some of the program cost. Non-members will be charged a slightly higher fee for the program because they are not paying for a membership at the Putnam County YMCA. The ECHO program will also seek additional funding through sponsorship. Local area businesses such as Wal-Mart, and St. Rita’s Medical Center may be asked to sponsor the program. Local businesses will also be asked for donations towards the ECHO program, such as a healthy snack donation. Again, it is vital that the first year of the program use grant money because of the developmental
cost of the program, as well as the importance of building a positive reputation. If the ECHO program were to require fees initially without proving the program’s effectiveness and value, this would be a barrier to program participation and start up. It is also important to mention that expensive kitchen equipment and supplies will have been purchased with the initial grants, and should not need to be repurchased. This will help make the ECHO program more sustainable and manageable for the Putnam County YMCA.

Program Evaluation

*Evaluation Procedures*

In order to determine success and any revisions that are necessary throughout the life of the ECHO program, program evaluation must be done. After every ECHO program at the Putnam County YMCA, a formative evaluation will be distributed by the ECHO program coordinator. A similar survey to the Parkview YMCA of Fort Wayne, IN will be used evaluate the ECHO program (Appendix P). The survey measures items such as the quality of the program environment, and the health and safety of YMCA. The survey also asks the participant to give information on the quality of the instructor, quality of the staff, the leadership quality, and quality of the program material and activities. The registration process, program retention, and how closely the program relates to the YMCA mission are also questions that the survey asks. Also, the surveys help gather demographic information on the program participants. The ECHO program facilitator will distribute this evaluation to the parents and children to complete together at the conclusion of the ECHO program (Appendix P). Although the YMCA survey gathers important information, it does not measure the specific objectives of each program. Because the YMCA survey (Appendix P) will not collect data related to the ECHO program objectives, the ECHO program coordinator will collect more program data throughout the year. The collected
data will be presented to the Putnam County YMCA and other key stakeholders in order to illustrate the value of the program.

The ECHO program will use a summative evaluation process to record data that shows advancement towards the ECHO program objectives. The occupational therapist will record the data on an electronic objective record document (Appendix Q). An updated hard copy file will be kept at the Putnam County YMCA, and this will be confidential and stored in a locked area. The objectives will be overseen first hand by the occupational therapist in charge of the ECHO program.

1. With the help of the occupational therapist in Week 1 of the ECHO program, the ECHO program participants will identify at least two goals focused on improved nutrition, two goals to have improved physical fitness, and two goals to have improved psychosocial skills and will be recorded in Appendix F.
   a. The therapist will record the goals that he or she and the child come up with during week one of the program. The objectives record will show that each child will set a total of six individualized goals.

2. Three of the six participant goals will be met within Week 4 of the ECHO program, and will be recorded in Appendix F through self report with the ECHO program facilitator.
   b. The therapist will record in the objectives record at week 4 whether or not the child has achieved at least three of the six goals made in week 1. Of the estimated 192 participants during the first year of ECHO, 50% are expected to meet this objective (96 children would achieve this objective).

3. Seventy five percent of the participants will have an overall improved increase of psychosocial skills at the conclusion of the ECHO program, as measured by pre-post
psychosocial skills section of the self report completed by the parent and child together at pre-post intervention (Appendix G, Psychosocial Skills questions 1-4).

c. During week one of the ECHO program, the therapist will total the number of points the parent and child have scored on questions 1-4 of the psychosocial skills questions in the self report. It is important to mention that the higher the number, the more positive the psychosocial skills are. For example, a score of 10 is very good, and a score of 0 is very bad. The higher a person scores himself or herself, the more positive he or she is on his or her own psychosocial skill rating. The therapist will total and record the score for these four questions of the self report after week 1, and will complete the same process in week 8. On the objectives record, the therapist will record whether the child had a point increase, stayed the same, or had a negative decrease.

4. Seventy five percent of the participants will report consuming at least two servings of fruit and three servings of vegetable a day at the conclusion of the ECHO program, as measured by pre-post nutritional intake section of the self report completed by the parent and child together at pre-post intervention (Appendix G, Nutritional Intake questions 1-2).

d. The occupational therapist will report in the objective records if the child is consuming at least two servings of fruit and three servings of vegetable a day. The therapist will also count children who may be consuming more than this amount. The questions on the self report completed during week eight of the program will be documented in the objective record sheet (Appendix Q). The
therapist will determine whether or not the objective has been met by group of children.

5. At the conclusion of the program, seventy five percent of the participants will report physical activity for 60 minutes a day for at least 4 days of the week, as measured by the pre-post physical fitness section of the self report, completed by the parent and child together at pre-post intervention (Appendix G, Physical Fitness questions 2-3).

e. The parent and child together will complete the self report, and questions two and three address how many times week a child participates in healthy occupation outside of the school day, and how many average minutes the child engages in healthy occupations. The questions on the self report completed during week eight of the program will be documented in the objective record sheet (Appendix Q). The therapist will determine whether or not the objective has been met by group of children.

Stakeholders

The potential children that will be served are very important to the evaluation of the ECHO program. The children are the population that is being targeted to change, but without the cooperation of their parents, this change will not be as likely. A child’s parent will determine whether he or she will let their child participate in the program. A parent will also likely determine how much encouragement and support that he or she wants to give to their child regarding healthy lifestyle and habits. A parent may or may not make an effort to provide healthy foods in the home, or to even exercise themselves. Therefore, not only is it important to interview the children throughout the ECHO program, it is important to get parents of the children committed to the program. Throughout the program, the children will be asked after
every ECHO session what they like and what area of lifestyle they would like to spend more time on (e.g., cooking, eating, fitness, or psychosocial skills). When a parent picks up his or her child from the program, the occupational therapist also will informally interview the parent about such topics as how the program is going, what the strengths of the program are, and what may need improvement. The YMCA is another important stakeholder for the ECHO program, because this organization is sponsoring and providing a lot of in-kind support for the ECHO program. Without the YMCA, the program may not be possible, and the costs would be too high to run the program. The children, parents, and YMCA organization and staff are all important stakeholders in the ECHO program.

Timeline

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Market/Recruitment of participants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Update participant Numbers and mail out ECHO program details to parents/children</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Week ECHO program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compile assessment data</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weekly meetings with YMCA senior staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Emphasizes times of strong concentration on task*

*Emphasizes times of maintaining task with less concentration on task*
Letters of Support

Many sources will be asked for letters supporting the start up of the ECHO program. A letter of support (Appendix H) has been attained from the Putnam County YMCA’s Family Wellness Coordinator, Carla Niese. Ms. Niese was chosen for the letter of support because of her strong background in the areas of health and wellness, and her support of the programming at the Putnam County YMCA. The Putnam County YMCA has an interest in the seeing the ECHO program develop and succeed in meeting its goals and objectives. Because the facility currently has no programs focused on childhood lifestyle, this will help the Putnam County YMCA meet a portion of motto. The YMCA seeks to build strong children, strong families, and strong communities. The ECHO program will allow this facility to strive to build stronger children.

Also, the ECHO program will help the Putnam County YMCA better fulfill its mission, which is: “To put Christian principles into practice through programs that build spirit, mind, and body for all.” A letter from Ms. Niese illustrates that the Putnam County YMCA views the ECHO program as a worthwhile benefit and element of facilities programming.

Additional letters of support will be sought from many other pertinent sources. Contact information for the sources is also attached to this document (Appendix I). A letter may come from a parent that is a member of the YMCA. A letter may come from a parent of a potential ECHO participant may be required to write letters of support for grants. It is also expected that an older potential participant (e.g., sixth grader) would also be asked to write a support letter. A letter from the population will show the need for the program, and will validate the potential success of the ECHO program. No contact information for a parent or child is available.

Another source of support will be from the Director/CEO of the Putnam County YMCA. Steven Tomboni would likely support the program because it is needed at the facility, and will help
expand the programs for children that are available at the Putnam County YMCA. Brenda Michel, Membership relations and director of child watch at the Putnam County YMCA, is another potential letter of support writer. She will be able to express how the ECHO program will be coordinated to fit the needs of children and parents by being offered as an optional program that is complimentary to the YMCA’s adult fitness classes and after work fitness hours. Ohio Governor Ted Strickland is another important person that would be another likely supporter of the program. Also, because of Governor Strickland’s positive reputation and position of power, he would be a very strong person to attain a letter of support from. Another strong person a letter of support would come from is Danielle Oliver, who is a registered nurse and program director for St. Rita’s Healthy Eating and Exercise Program for Children. Danielle has several years experience implementing St. Rita’s Healthy Eating and Exercise Program for Children, which is a program from overweight children and their parents. The program has a positive reputation and knowledge in the area of childhood/adolescent wellness programming. A final source of support may be from the Putnam County Health Department, Joan Kline. Ms. Kline is the director of the Health Department, and has done programs in the past in collaboration with the YMCA.
References


http://www.childtrendsdatabank.org/indicators/15OverweightChildrenYouth.cfm


Digest. Retrieved November 26, 2007, from


Company.


National Center for Chronic Disease Control and Prevention (2008). Promoting physical
Disease Control and Prevention Web site:
http://www.cdc.gov/nccdphp/dnpa/pahand.htm

National Center for Chronic Disease Control and Prevention (2007). Overweight and Obesity:
Economic consequences Retrieved November 27, 2007, from Center for Disease
Control and Prevention Web site:

Ohio Collaborative Research and Policy for Schools, Children, and Families (2007). The Ohio
Project: Progress in Preventing Childhood/Youth Obesity, How do we measure up?
Retrieved on February 11, 2009 from: www.ohiocollaborative.org

Ohio Department of Health (2009). Child obesity rates “unacceptable” Ohio Department of
Health releases Ohio obesity prevention plan. Retrieved on April 27, 2009 from:


Appendix A

Putnam County YMCA
Staff Organizational Chart

Steve Tomboni
President/CEO

Brenda Michael
Carla Niese, Family Wellness Coordinator
Tammy Schroeder, Member Service Director
Dave Beckett, Building Maintenance
Peg Mormon, Aquatics Director
Doug Klima, Youth Sports Director

ECHO Program Facilitator, Occupational Therapist
The purpose of this survey is to help determine if there is a need for a YMCA after school program for children and youth in Putnam County and the surrounding areas.

1. How many children do you have?

2. What are the ages of your children?

3. Is your child or children alone after school until a parent or parents return from work? Y or N

4. Would you be interested in enrolling your child or children in an after school program? Y or N

5. What after school program(s) would you be interested in (check all that apply)?
   __ Healthy Nutrition
   __ Physical Fitness
   __ Self-Esteem
   __ Social Skills
   __ Others: ____________________________________________________________

6. If you are not a Putnam County YMCA member, would you be more likely to join if an after school program for children & youth was offered? Y or N
Appendix C

Would you be likely to join if programs were offered

- Home Alone
- After School Programs
- Interested in After School Program
- Nutrition Program
- Fitness Program
- Self esteem Program
- Social Skills Program
- Other programs

Responses:
- YES
- NO
- Maybe
- NO
Appendix D

Annotated Bibliography


**Objective:** Classroom teachers teach handwriting, but when problems arise, students are referred to occupational therapy for remediation. This study, conducted by occupational therapists, reviews handwriting instruction by classroom teachers in one school district.

**Method:** Teachers from kindergarten through grade 6 were asked to complete an open-ended questionnaire regarding handwriting instruction.

**Results:** Teachers differed in their methods of instruction, including in the programs and paper used, and practice provided. Teachers of grades 5 and 6 had to continue to review handwriting instruction by interpreting information from motor learning theory pertaining to instruction and practice, which supports acquisition, transfer, and retention of handwriting skills. They also need to be cognizant of prior handwriting instruction when addressing handwriting difficulties.


**Purpose:** We measured fine motor and emergent literacy outcomes in kindergartens enrolled in two integrated kindergarten classrooms. The students received fully integrated occupational therapy services. Most occupational therapy services focused on planning and teacher consultation versus direct intervention.

**Method:** A one-group pretest-posttest descriptive design was used to measure occupational therapy and emergent literacy outcomes in a convenience sample of 37 kindergarten-age children with and without disabilities. Four fine motor and two emergent literacy assessments were administered at the beginning and end of the school year. Data on the amount and type of occupational therapy services were documented over 7 months.

**Results:** Children without disabilities made statistically significant changes in all areas. Children with disabilities made significant changes in two of the fine motor and three of the emergent literacy assessments.

**Conclusions:** Findings demonstrated that for this sample of children, significant improvements in the motor and emergent literacy function were made. "Emergent literacy is concerned with the earliest phases of literacy development, the period between birth and the time when children read and write conventionally." It has been shown that there is a significant correlation between in-hand manipulation and handwriting skill. Visual-motor integration also has been identified as a strong predictor of hand-writing skill.

The American Occupational Therapy Association, Inc., supports and promotes involvement of occupational therapy practitioners in the development and provision of health promotion and disease/disability prevention programs and services. These health promotion programs and services may target individuals, groups, organizations, communities, and policymakers. Their focus is to (a) prevent or reduce the incidence of illness, accidents, and injuries in the population; (b) improve the overall health and wellbeing of persons with chronic conditions or disabilities and their caregivers; and (c) promote healthy living practices, social opportunities, and healthy communities, with respect for cross-cultural issues and concerns.


The American Occupational Therapy Association (AOTA) Representative Assembly adopted a statement on obesity in 2006. In this statement, AOTA endorsed occupational therapy intervention as a way to meet the needs of children and adolescents who are or who are at risk for overweight status or obesity caused by controllable lifestyle factors (AOTA, 2006). Pediatric occupational therapists are in a unique position to support children in increasing activity levels and developing healthy habits. Occupational therapy practitioners are especially needed to promote health and support change in urban communities in which environmental influences place children at a high risk for unhealthy lifestyles and subsequent health problems. Contextual factors that influence the health of children in urban environments and the rights of children as they relate to health are discussed in this article. Children’s social justice and rights advocates
have argued that every child in the United States should have the right to grow up in a safe, healthy, and supportive environment that affords them the opportunity to have a nutritious diet and healthy, active lives. Numerous neighborhoods across the United States possess cultural and environmental factors associated with limited access to fresh and nutritious foods and lack of opportunities for physical activity, in addition to limited access to parks and green spaces. Underprivileged diets and environments may be contributing to the increase of childhood obesity.

The Surgeon General’s Healthy People 2010 initiative identified promoting physical activity along with healthy eating among children as two of its top priorities. Many child advocates consider factors that lead to childhood obesity to be an infringement on children’s rights. From this perspective, childhood obesity is more than a public health epidemic; it is a social justice issue. Even though childhood obesity is increasing in all ethnic groups, it is even more pronounced in children growing up in urban, low-income, and working-class African-American and Latino communities, who are at a greater risk for becoming overweight than children of other ethnic backgrounds. In fact, in urban environments, like Chicago, 58% to 68% of African-American and Latino children are overweight compared with 23% of White children. Convention on the rights of the child (CRC) has 51 articles that make it up. Examples of the articles include designing programs that promote the healthy development of children’s bodies and advocating for children in the health care system so they are not discriminated against. Occupational therapy practitioners can provide interventions to children in underserved communities by addressing family habits and routines as well as school and community supports. Occupation-based practice models allow practitioners to remain child centered when attempting to bring about systems change to reduce health disparities encountered by underserved children. Parents’ perceptions of potential obesity risk factors and family habits influence children’s
health. Children’s tendency to engage in physical activity is established in early childhood and continues throughout adulthood. An occupational therapist can educate parents in underserved communities on the importance of physical activity for the entire family, assist them in establishing routines, and link them to available community resources. Also, the therapist can work with parents to identify and develop habits associated with shopping and meal preparation. The school environment has also been found to play a role in children’s activity levels and health beliefs. The therapist can work together with school systems to provide additional physical activity opportunities and support for the development of healthy habits. A suburb just outside of Chicago, students and faculty from an occupational therapy department worked with a local elementary school to establish a multitiered healthy lifestyle initiative that focused on increasing occupational participation, supporting the development of volition, establishing healthy performance patterns, and upholding the rights of children. Before the start of the initiative, the school’s administration acted in the best interest of the children and removed vending machines loaded with high-calorie, low-nutrition foods, and parents were asked to refrain from sending such items in for snack time and birthday parties. Also, a related-service team member started a weekly open gym time before school to provide children with increased opportunities for physical activity. After the program started, efforts were given to increase community awareness of the initiative. Neighborhood businesses were active in expanding the brevity of efforts and donated equipment, such as pedometers, and incentives for children who participated in the open gym and other aspects of the program. Local occupational and physical therapists developed a resource guide for families that included maps to local parks and innovative ideas for low-cost nutritious meals and active leisure options. Occupational therapy students used the model of human occupation to guide the development of classroom groups that focused on helping elementary school children to increase their sense of self-efficacy with physical activities.
Children were encouraged to share their values and interests, and they provided insights about how the information they learned through the initiative would be incorporated into their family’s habits and routines.

Yet another school-based effort involving occupational therapy students and faculty focused on changing habits of students and staff of Chicago Public School children at lunchtime. A multidisciplinary team for a school of predominantly Hispanic children adopted a healthy lifestyles curriculum that included more access to physical activity, the introduction of a salad bar at lunchtime, and more nutrition content embedded throughout the curriculum. The occupational therapy students helped provide nutrition education to children, with an emphasis on mealtime habits and in recording the students’ food choices during lunch time. Also, children at the school were introduced to new interests, for example container gardening. The children were given the opportunity to explore various professional roles, including farmer. Children in the school chose items from the salad bar as an addition to their meal or as the entrée itself, and children’s knowledge of fruits and vegetables significantly increased.


Obesity is a significant and wide-ranging health and social problem in the United States. Occupational therapy is a health care profession that is qualified to provide interventions with individuals, groups, and society to effect change to promote optimum health. Occupational therapy services are often used directly and indirectly to influence weight management and related health concerns through attention to lifestyle and engagement in fulfilling activities. The purpose of this paper is to explain to persons within and outside of the profession the role of
occupational therapists and occupational therapy assistants in addressing the impact of obesity on people’s ability to engage in daily activities.

This article supports the occupational therapy professional in community based programs, like the ECHO program, that are focused on obesity and lifestyle.


This study describes sensory experiences of children with and without autism. Parents of 66 preschoolers (29 typically developing; 37 with autism) described situations in which their child had “good” and “bad” sensory experiences and their perception of how these situations felt to the child. The most common unpleasant experiences for both groups related to sound; the most common pleasant experiences involved touch and movement. Children with autism were reported to have more extreme or unusual experiences and negative food-related qualities of the child, stimulus, or context. Parents of children with autism were more likely to recognize elements in their children’s experiences as being sensory and to attribute those responses to aspects of autism. Parents’ positive response to the interview itself was an unexpected result with clinical relevance.


This study describes a single-subject (ABA with follow-up evaluation) that demonstrated the possible effective use of constraint-induced movement therapy (CIMT) in producing gains in
movement and function for a 24-month-old child with chronic hemiparesis. The noninvolved upper extremity was placed in a removable splint for 21 consecutive days. The child was involved in intensive occupational therapy in the home environment. Daily measurements were completed on the use and quality of motion of the involved upper extremity for eight specific fine and gross motor activities. Change in performance and quality of movement were measured and significant at the p < .05 level with the calculation of the C statistic for the motor activities with gains maintained after completion of the treatment and postsplinting phases. The results of the study contribute to the body of evidence finding CIMT to be effective for increasing movement and function in children with hemiparesis.


**Objectives**: This study investigated the relation between functional performance skills of children with Down syndrome and the age of entry into mainstream elementary education.

**Method**: In a cross-sectional study of 70% of the 7-year-old children with Down syndrome in Norway (N = 43), we measured functional performance using the Pediatric Evaluation of Disability Inventory (PEDI). The study was a follow-up of a previous study of the same children at age 5 assessed using the same instrument. Data from both studies were used in the analysis.

**Results**: Forty percent of the sample of children with Down syndrome in Norway had entered elementary school after a 1-year postponement (i.e., at age 7). The functional performance skills of the children, as measured using the PEDI, were significantly lower at both age 5 and 7 in self-care and social function compared with children with Down syndrome who entered elementary school at the usual time (i.e., at age 6). The main characteristics associated with postponed elementary school entry were found in communication skills and bladder and bowel management.

**Conclusion**: A certain level of development and independence seems to be required for a child with Down syndrome to be viewed as ready to enter elementary school, and perceptions of readiness for school may be culturally dependent. In addition to the well-described challenges in language and communication skills, being viewed as ready for school includes having stopped diapers, a topic not previously mentioned as a factor in postponing elementary school entry for children with Down syndrome. Awareness of culturally influenced performance skills may give
direction to parents and professions in targeting areas in the preschool years that might help promote these children’s readiness for school.

Some children with Down syndrome have associated impairments that may affect their development. The most common impairments are hypotonia, heart defects, and hearing and visual impairments. In general, children with Down syndrome show a relative strength in tasks that involve visual over auditory processing and a relative weakness in communication skills, specifically in expressive language and grammar.


*American Journal of Occupational Therapy, 63,* 96-104.

**Objective:** This study investigated the effects of cerebral palsy (CP) and gender on youth participation in activities outside of formal school.

**Method:** Twenty-two participants with CP and 30 typically developing peers, ages 12-16 years, completed the Children’s Assessment of Participation and Enjoyment (CAPE; King et al., 2004).

**Results:** Typically developing youths engaged in a broader range of activities and did so more frequently than did youth with CP. Similar levels of enjoyment in activity were found in both groups. In some scales of the CAPE, youths with CP participated in proportionally more activities alone and at home. Gender differences and Group X Gender interaction were found in some scales with respect to participation in and enjoyment of activities.

**Conclusions:** Physical limitations associated with CP may affect the frequency of a child’s participation in activity outside of school. However, youths with CP may express levels of enjoyment similar to those of typically developing peers while participating in activity.

Cerebral palsy (CP) is one of the most common severe physical disabilities that affect children. In the United States, CP affects approximately 0.2% of neonatal survivors. Children with CP often require life-long intervention that may involve drug therapy, surgery, and treatment by various health professions such as occupational, physical, and speech therapists.

Diplegia is defined as paralysis of corresponding parts on both sides of the body, and quadriplegia is complete paralysis of the body from the neck down. Paralysis is defined as complete loss of strength in an affected limb or muscle group, and paresis is defined as slight or partial paralysis. Athetosis is defined as repetitive, involuntary movements, slow, sinuous, writhing movements, especially severe in the hands.

This article is a summary and follow-up to the Well Elderly study, and has confirmed that Lifestyle Redesign intervention not helps clients, but is cost-effective. The Well Elderly study found that the results on assessments to test their health-related quality of life, daily functioning, and psychosocial well being, the results strongly support occupational therapy. The assessments were done at the beginning of the study, after the 9-month intervention phase, and after a 6 month follow-up period. The elders who were engaged in occupational therapy evidenced significant benefits for the following self-rated outcome variables: life satisfaction, quality of social interaction, overall health perception, physical functioning, vitality, health-related role functioning, social functioning, emotion-related role functioning, mental health, and reduced bodily pain. Also, in the absence of further intervention, the positive effects of occupational therapy remained at the time of the 6-month follow-up assessment. On average, 90% of the relative gain for the elders who received occupational therapy was retained. The Lifestyle redesign treatment was tested against the industry standard for measuring cost-effectiveness, comparing it to therapies such as heart bypass surgery and breast cancer chemotherapy. Occupational therapy was found to be an enormous value for the money. Also, there were significant quality-of-life improvements that the occupational therapy group reported were achieved without increasing health care costs compared with the control groups. The “ingredients” of the Well Elderly intervention include: a) Occupational science foundation, b) broad-based orientation, and c) the therapist as a collaborator. Recommendations for therapeutic practice include: a) believe in the important role of occupation in the healing process, and when possible, communicate this belief to your clients, b) familiarize yourself with local treatment
populations, and administer treatment in a culturally sensitive manner, c) make every effort to understand and work the client, considering him or her as a unique individual, and d) familiarize yourself with occupational science, and keep abreast of new knowledge pertaining to occupation and its application in practice.

Hildebrand, W.C., & Froehlich, K. (2002). Promoting health: Historical roots, renewed vision. Retrieved February 14, 2008 from OT Practice online:


Wellness is defined and described in this article as “dynamic way of life that involves actions, values, and attitudes that support or improve both health and quality of life.” The difference between health promotion and health maintenance differ in focus and intent. Health promotion is described as increasing levels of wellness, while health maintenance and disease prevention aim to preserve the status quo or stable health. Health promotion is viewed as “approach” motivated, whereas health maintenance is viewed as “avoidance” motivated. Occupational therapist have long focused on disrupting the disablement process, while using specific interventions to restore ability or rehabilitate a patient who is already affected by illness or disease. Health promotion efforts can be directed at persons both with and without disabilities. An initiative that corresponds well to occupational therapy is the Healthy People initiative, begun by the federal government more than 2 decades ago to improve the health status of all Americans. Lifestyle factors account for 50% of all deaths. Occupational therapists have a challenging role in developing occupation-based health promotion programs targeting people with and without disabilities. Health promotion efforts may target personal decision-making and health practices, health-promoting parenting styles and family contexts, and community and environmental design that supports access and healthful living for all persons.

Children’s learning to do everyday activities seems so obvious that the mechanisms bringing about the development of occupations remain essentially unstudied. Therefore, occupational therapy uses developmental models from other disciplines as foundation for practice. We specialists in childhood occupations need a theory-based and empirically tested body of knowledge about the processes leading to change to inform practice and guide interventions during efficacy studies. One body of knowledge about developmental mechanisms views change as originating from within the child and informs practice centered on changing the child. Given the inseparable nature of children and their social environments and daily activities, we introduce the philosophy of contextualism and outline a potential body of knowledge about a change process that is occupation centered. An intervention arising from a contextual perspective illustrates how this way of thinking leads to occupation-centered practice that uses multiple strategies and supports a child’s occupation with social participation with peers.


This article was written by a registered dietitian, and was also medically reviewed before its publication. The article discusses why it is important to monitor what kids eat, statistics on fat consumption for kids (reports estimate total fat consumption for kids is about 25% higher than recommended), kid’s average dietary fiber intake, and determining whether your kid is at risk for developing a weight problems. The article also gives recommendations for how to increase fiber in a kid’s diet, as well as healthy sample meals for kids’ ages 4-12 years old.
important article because the statistics and recommendations can be cited and restated in a
handout for parents and children in the ECHO program.


This document introduces childhood obesity and discusses statistics for overweight American children. Risk factors are listed, along with screening and diagnostic criterion. Complications associated with obesity are listed, along with social and emotional implications that may be associated with the disease. Treatment ideas, coping strategies, and preventative techniques are also discussed in this document.


Objective: The purpose of this study was to evaluate a pilot occupational therapy wellness program designed to teach elders the importance of participation in meaningful social and community occupations to their quality of life.

Method: Sixty-five older adults participated in this pilot wellness program held at each of three senior apartment complexes. Measures of health-related quality of life using the SF-36 Health Survey and frequencies of social and community participation from a program-specific intake form were completed by 39 participants before and after the 6-month program. Participants also evaluated components of the program through a satisfaction survey.

Results: Scores on the SF-36 Health Survey were significantly higher in vitality, social functioning, and the mental health summary scores following participation in the program. Participants reported an increased frequency of socialization and community participation with an average of 55% participating in at least three or more activities per week before the program to an average of 66% participating after the program. Participants who benefited the most attended more classes, were older, and were nondrivers. Eight percent of those polled rated the pilot program as good or excellent.

Conclusion: This pilot study provides additional support for prevention efforts for elders in the community. Wellness programs for seniors may be most effective if targeted to those who are older and non-drivers.


**Objective:** The study describes the current role of occupational therapists in the transition of young children with special needs from early intervention to preschool and from preschool to kindergarten.

**Method:** Questionnaires were mailed to a random sample of 500 pediatric occupational therapists who are members of the American Occupational Therapy Association’s School System Special Interest Section.

**Results:** The response rate was 44.3% with 173 usable surveys. Approximately 40% of therapists working the early-intervention-to-preschool transition and 32% of therapists working in the preschool-to-kindergarten transition reported not participating fully in the process. The primary barrier to full participation was “not enough time.” Evaluation was identified as the most frequently used strategy for participation. Only 23% of respondents reported receiving specialized transition training.

**Conclusions:** Although limited by a small sample, the study provides an initial description of occupational therapists’ participation in early childhood transitions.


Occupational therapy home programs are a common approach used to proved interventions for children with cerebral palsy, but there is little evidence to demonstrate the effectiveness of such programs. This single-group pretest-posttest design pilot study evaluated the impact of an occupational therapy home program implemented with 20 children who had spastic hemiplegic cerebral palsy (ages 2-7 years, mean 3.8). We measured impact using Goal Attainment Scaling (GAS), the Pediatric Evaluation of Disability Inventory (PEDI), and the Quality of Upper Extremity Skills Test (QUEST). We measured participation amount through a parent self-report log. Significant changes’ following intervention occurred in scores on the GAS, the PEDI Functional Skills and Caregiver Assistance Scales, and the QUEST, but has found no relationship between participation amount and outcome using the same measures.
These promising results suggest that further investigation of the impact of occupational therapy home programs is warranted.


**Objective:** This study investigated the meditational role of team sports and other leisure occupations for boys ages 10 to 13 years in the relationship between physical coordination ability and perceptions of loneliness.

**Method:** Sixty boys with developmental coordination disorder (DCD) and 113 comparison boys without DCD completed a self-report measure of loneliness. Parents recorded information on leisure involvement over 7 days.

**Results:** Boys with DCD recorded significantly higher loneliness and lower participation rates in all group physical activities, whether structured (e.g., team sports) or unstructured (e.g., informal outdoor play) than boys without DCD. An inverse relationship between physical coordination ability and loneliness was mediated by participation in team sports. No other leisure pursuits were found to be significant mediators. Childhood physical coordination difficulties were significantly associated with loneliness.

**Conclusion:** Participation in team sports acted as one potential mechanism mediating the inverse relationship between physical coordination ability and loneliness in boys. Occupational therapists can act as advocates to support boys with DCD who choose to participate in team sports. Further investigations are recommended to determine aspects of team sports environments that promote an optimal fit among child, activity, and environment.

Developmental Coordination Disorder (DCD), the defining feature of DCD is marked impairment in the development of motor coordination in the absence of neurological or sensory problems. Motor coordination is below the level expected for intelligence or chronological age, and the impairment interferes with activities of daily living. Approximate estimates of incidences vary between 5% and 15%, and four times more boys that girls are referred for intervention.

Objective: The current literature offers no cohesive definition of occupation-based practice. Current definitions emphasize intervention forms and context, which do not reflect the complexity of practice. This article demonstrates that the therapeutic relationship and the meanings that are created in the therapy process are central aspects of occupation-based practice. Occupation, as an idea that emerges in the therapeutic process, has aspects of both doing and becoming.

Method: The authors conducted observation sessions and interviews with an occupational therapist, Nancy, who used multiple therapeutic strategies with one child, Hannah, as they worked toward Hannah’s goals of going to preschool and becoming a friend.

Results: Strategies include changing therapeutic conditions, using cognitive strategies, drigding the person-task-social context, pushing participation, and engaging in narrative micronegotiations.

Conclusion: Occupation emerged in the therapeutic processes as the occupational therapist and client co-created meaning about the client moving toward or away from who she wanted to become.


Objective: The study examined behavioral treatment effects of classical sensory integration therapy.

Method: This study used a prospective longitudinal, single-subject ABAB design. The participant was a boy, age 3 years and 5 months, with average nonverbal intellectual skills, delayed communication skills, and sensory modulation disorder. Difficulties with modulating sensory input and delayed communication skills affected his occupational performance in preschool. Behavioral data were collected in the preschool by teachers who were blind to the type and timing of sensory integration therapy.

Results: Improvement in behavior regulation was observed, including increased engagement and decreased aggression, less need for intense teacher direction, and decreased mouthing of objects.

Conclusion: Classical sensory integration therapy may be associated with improved self-regulatory behaviors.

Sensory Modulation Disorder (SMD)- describes problems in regulating and organizing the degree, intensity, and nature of responses to sensory input in a graded manner that interferes with age-expected social, cognitive, or sensory functioning. Persons with SMD display overresponsivity, underresponsivity, or lability in response to sensory stimuli. These
abnormalities often are associated with connected sensory-seeking or sensory-avoidant behaviors that reflect a person’s attempt to regulate the sensory input and achieve an optimal or comfortable level of arousal. Functional problems associated with SMD include decreased social skills and participation in play; decreased frequency; duration, or complexity of adaptive responses; impaired self-confidence; and diminished fine motor, gross motor, and sensorimotor skill development.


This investigation compared language use and social interaction in children with autism receiving two forms of occupational therapy: occupational therapy using standard techniques, and occupational therapy incorporating animals. Twenty-two children between the ages of 7 and 13 received both forms of therapy in a school based occupational therapy program for children with autism. Results suggest that the children demonstrated significantly greater use of language and significantly greater social interaction in sessions incorporating animals when compared to sessions using exclusively standard occupational therapy techniques. Findings are discussed in the context of recent research that has highlighted the importance of enhancing the motivation of children with autism to engage actively in therapeutic and learning process.

Autism is a profound developmental disorder characterized by severe impairments in social behavior and in communication, and by restricted or stereotyped interests and behaviors. Praxis is defined as the planning and execution of complex motor sequences.

According to the book, the typical American child now spends about twenty-one hours a week watching television—roughly one and half months of TV every year. Outside of school, the typical American child spends more time watching television than doing any other activity other than sleeping. During the course of the year, he or she watches more than thirty thousand TV commercials. Even the nation’s youngest children are watching a great deal of television. About one-quarter of American children between the ages of two and five a TV in their room. Every month about 90 percent of American children between the ages of three and nine visit a McDonald’s.


**Objective:** In the context of a group process course, occupational therapy students learned health promotion skills through working on personal wellness goals and leading community-based health promotion groups. The groups targeted topics such as smoking cessation, improving diet, reducing stress through yoga, meditation, tai chi chuan, ROM (Range of Motion) Dance, aerobics, and a variety of other activities.

**Method:** After identifying a personal wellness goal and developing it in a Wellness Awareness Learning Contract, each student used a Goal Attainment Scale (GAS) to predict an expected outcome for achieving the goal and to measure his or her progress toward attaining the goal. Students also used the GAS to measure progress in attaining group leadership skills within the community groups, which they outlined in a separate Group Skills Contract. Students kept weekly logs to foster reflective thinking, and the logs were used for interactive dialogue with the instructor. To further evaluate lifestyle change, students compared pretest and posttest scores on a Self-Assessment Scorecard, which surveyed six areas of health and human potential in body, mind, and spirit.

**Results:** Students monitored their own change process on both their personal health lifestyle goals and their group leadership skills while developing a richer appreciation of the dynamics of working for change with clients in community and traditional settings. Differences on the Self-Assessment Scorecard indicated improvement on two of the six scales for physical health and choices.

**Conclusion:** Students experienced firsthand the challenges of developing healthier lifestyles on the basis of their personal goals as well as through fostering group changes. The two GAS learning contracts provided them with concrete evidence of their growth and learning. This
experience - embedded in the context of a group process course with a community service learning group practicum - provided most students with a positive initial experience with group leadership as they began to explore roles as agents for lifestyle and health change. Suggestions for expanding health promotion roles in practice in the changing health care environment are also examined.

This article can be used to help support occupational therapy professionals in the role of health promotion, and leading health groups promoting lifestyle changes. This article is an example of how occupationally therapy professionals can help a patient set lifestyle goals in order to achieve improved health.


**Objective:** The purpose of this pilot study was to identify the incidence of maladaptive behavior in youths enrolled in community living and support training programs. Direct observation and partial-interval time sampling was used to determine occurrence of behaviors to develop effective strategies for group participation.

**Method:** Participants were 30 youths ages 10 to 17 and diagnosed with behavioral disorders. Four observers recorded incidence of eight maladaptive behaviors during three group occupations using direct observation across time and setting, twice per week for 8 weeks.

**Results:** Intraclass correlation coefficients (ICCs) were used to describe the interrater reliability of four observers in recording frequency of maladaptive behaviors. Interrater reliability was high to moderate for the most commonly demonstrated behaviors (ICC=0.83-0.89). Lower agreement was observed in behaviors that were less frequent, such as violent episodes and sexual inappropriateness (ICC = 0.66-0.68).

**Conclusion:** Direct observation across time and setting demonstrated good-to-moderate interrater reliability in identifying frequency of behaviors that may interfere with group participation. Observation provides the opportunity to document occupation-based assessment without having to depend on youths’ willingness and ability to answer questions.

Objective: This study investigated the contribution of perceptual-motor dysfunction and cognitive planning problems to the quality or speed of handwriting in children with handwriting problems (HWP).

Method: Twenty-nine children with HWP and 20 classroom peers attending regular schools (grade 2 and grade 3) were tested with regard to visual perception, visual-motor integration, fine motor coordination, and cognitive planning abilities.

Results: The HWP group scored significantly lower on visual perception, visual-motor integration, fine motor coordination, and cognitive planning in comparison with classroom controls. Regression analyses showed that visual-motor integration was the only significant predictor for quality of handwriting in the HWP group, whereas fine motor coordination (i.e., unimanual dexterity) was the only significant predictor of quality of handwriting in the control group.

Conclusions: Results suggest that two different mechanisms underlie the quality of handwriting in children with and without handwriting problems. Poor quality of handwriting of children with HWP seems particularly related to a deficiency in visual-motor integration.

Thirty percent to 60% of a child’s time in school is spent in fine motor activities, with writing as the predominant task.


Objective: Research examining sensory processing patterns in persons with Angelman syndrome is nonexistent despite anecdotal evidence and clinical diagnostic criteria that may reflect these features. The goal of this study was to better characterize sensory processing patterns in persons with Angelman syndrome.

Method: Parents of 340 persons with Angelman syndrome between 3 and 22 years of age completed a standardized measure of sensory processing, the Sensory Experiences Questionnaire.

Results: Results confirmed a high degree and variety of sensory processing abnormalities in persons with Angelman syndrome. These problems were most prominent in the areas of hypo-responsiveness to tactile and vestibular input, consistent with reports of sensory seeking behaviors in this population. Sensory processing deficits were not related to gender, seizure disorder, or genetic subtype. However, some behaviors were correlated with age.

Conclusion: This study provides the first systematic description of sensory processing abnormalities in a large sample of persons with Angelman syndrome. Considerations for enhancing occupational performance and social participation in this population through occupational therapy interventions are discussed.
Angelman syndrome is a neurogenic developmental disorder that occurs in between 1 in 10,000 and 1 in 20,000 births. Angelman syndrome is characterized by severe mental retardation, severe expressive language deficits, and ataxia. Seizures, microcephaly, and distinctive physical characteristics are common. Angleman syndrome most often results from a deletion of the maternal contribution to 15q11.2-15q13. More specifically, genetic mechanisms include maternal deletion, paternal uniparental disomy (UPD, two copies of the chromosome from the father), imprinting mutations, UBE3A gene mutation, and other chromosomal abnormalities of this region. There appears to be some association between genetic subtype and severity of symptoms. For example, persons with UPD are more likely to be seizure-free or develop some very limited expressive language in comparison to persons with a large maternal deletion. Those with UBE3A and imprinting center defects are thought to have a severity falling between that expressed in persons with a large deletion and UPD. The current consensus criteria for a clinical diagnosis of Angelman syndrome list a number of features that may be reflective of sensory processing deficits. For example, movement of balance disorder, usually in the form of ataxia, is ubiquitous to the syndrome, and hand flapping movements of hypermotoric behaviors, or both, are usually present. A number of other associated features present in 20% to 80% of persons with Angelman syndrome that may be attributed to sensory processing abnormalities include excessive chewing or mouthing behaviors, increased sensitivity to heat, and attraction to or a fascination with water. Sensory processing deficits are child factors that influence development and may be targeted for intervention by occupational therapist when there are adverse effects on the child’s ability to engage in meaningful occupations or social participation. Others have described persons with Angelman’s syndrome as hyperexcitable, along with laughing, grabbing and pulling at others, as well as excessive oral stimulation (e.g., putting objects in mouth).

Objective: This study examined the effects of Ayres’s sensory integration intervention on the behavior and task engagement of young children with autism spectrum disorders (ASD). Clinical observations and caregiver reports of behavior and engagement also were explored to help guide future investigation.

Method: This single-subject study used an ABAB design to compare the immediate effect of Ayres’s sensory integration and a play scenario on the undesired behavior and task engagement of 4 children with ASD.

Results: No clear patterns of change in undesired behavior or task management emerged through objective measurement. Subjective data suggested that each child exhibited positive changes during and after intervention.

Conclusion: When effects are measured immediately after intervention, short-term Ayres’s sensory integration does not have a substantially different effect than a play scenario on undesired behavior or engagement of young children with ASD. However, subjective data suggest that Ayres’s sensory integration may produce an effect that is evident during treatment sessions and in home environments.

Estimates suggest that the incidence of autism spectrum disorders (ASD) in the United States is approximately 6 per 1,000 children, equating to around 114,000 children younger than age 5 years. Kids who have ASD often demonstrate undesirable behaviors such as stereotypic motor movements, aimless running, aggression, and self-injurious behaviors.


Seven recent experimental and quasi-experimental studies have compared the exercise of subjects instructed to pursue some added goal (often termed purposeful activity) with the exercise of subjects instructed to exercise without the suggestion of an added goal (often termed nonpurposeful activity). This article suggests a new terminology for this type of independent variable and describes an experiment within this developing tradition. An occupational form
designed, through materials and instructions, to elicit a rotary arm exercise with the added purpose of stirring cookie dough was compared with an occupational form designed to elicit the rotary arm exercise with no added purpose. The subjects were 30 elderly female nursing home residents randomly assigned to the occupational forms. Results indicated that the added-purpose, occupationally embedded exercise condition elicited significantly more exercise repetitions than did the rote exercise condition (one-tailed $p = .012$). Exercise duration and exercise stoppages were also recorded.

This study provides additional support for the traditional occupational therapy idea of embedding exercise within occupation. Suggestions are made for future research involving the experimental analysis of therapeutic occupation. This article can be used to support occupationally embedded exercise in everyday life. For example, children in the ECHO program can be encouraged to incorporate occupations into physical activities, such as walking his or her dog or raki.
Appendix

ECHO Program BMI Assessment

Body Mass Index (BMI)                      Beginning ECHO Program- Week 1

Child’s Name: __________________________

Birthdate (Month, Day, Year): _________   Today’s Date: ______________

Height: ___ ft ____ inches

Weight: ____ lbs.

BMI score: _____     BMI classification for age: ___________________

Comments/suggestions:

______________________________________________________________________________________________

Body Mass Index (BMI)                      ECHO Program- Week 8

Child’s Name: __________________________

Birthdate (Month, Day, Year): _________   Today’s Date: ______________

Height: ___ ft ____ inches

Weight: ____ lbs.

BMI score: _____     BMI classification for age: _______________________

Comments/suggestions:

Appendix F
ECHO GOALS

Child's Name: ___________________

Week 1 (Date:__________)  Week 4 (Date:_______)  Week 8 (Date:_______)

Goal 1 Nutrition:

________________________________________________________________________

________________________________________________________________________

Week 4: __Met Comments: __Met Comments: __Unmet __Unmet

Goal 2 Nutrition:

________________________________________________________________________

________________________________________________________________________

Week 4: __Met Comments: __Met Comments: __Unmet __Unmet

Goal 3 Physical Fitness

________________________________________________________________________

________________________________________________________________________

Week 4: __Met Comments: __Met Comments: __Unmet __Unmet

Goal 4 Physical Fitness
Week 4: __Met Comments: __Unmet

Goal 5 Psychosocial Skills

Week 4: __Met Comments: __Unmet

Goal 6 Psychosocial Skills

Week 4: __Met Comments: __Unmet

Totals for Goals 1-6
Week 4-Midterm __# of Total Met Goals __# of Total Unmet Goals

Week 8: __Met Comments: __Unmet

Totals for Goals 1-6
Week 8- Final __# of Total Met Goals __# of Total Unmet Goals
Appendix G

Self Report

This self report will be completed pre and post ECHO program participation. This self report should be an honest report completed by the parent and child together. There are three components to this assessment that must be assessed. The three components are a self report of physical fitness, nutritional intake, and psychosocial skills.

Child's Name: _______________________________ Date of Birth: _____

Please List any Food Allergies: _________________________________

Today’s Date: ___________ School Attended: ________________

Physical Fitness:

1. Approximately how many hours/minutes a day do you watch television, play on a computer, or play videogames?

   _____ 15-30 minutes  _____ 3-4 hours
   _____ 30-50 minutes  _____ 4+ hours
   _____ 1-2 hours

2. How many hours/minutes a day are you involved in physical activities outside of Physical education and recess at school (e.g., walking, playing outside, swimming, riding bikes, unstructured play. Etc...)

   _____ 15-30 minutes  _____ 3-4 hours
   _____ 30-50 minutes  _____ 4+ hours
   _____ 1-2 hours
3. How many days a week do you participate in activities outside of Physical education and recess at school (e.g., walking, playing outside, swimming, riding bikes, etc…)
   ____ 0                   ____3
   ____1                     ____4 or more
   ____2

4. What playtime activities do you enjoy the most? (Check as many as you want!):
   ___Running/jogging       ___Swimming            ___Kickball       ___Basketball
   ___ Dodge Ball            ___ Riding a bike  ___Jump rope    ___ Football
   ___ Nintendo Wii         ___ Hide and Seek   ___ Four Squares ___ Soccer
   ___ Hop Scotch           ___ Gymnastics       ___ Volleyball
   ___ Skateboard           ___ Dance               Others:________________________
   ___ Badminton            ___ Baseball          _______________________________

4. List what physical activities you are typically involved with?
   1.  
   2.  
   3.  
   4.  
   5.  
   6.  
   7.  
   8.  

Nutritional Intake:

How many servings a day do you eat of each of the following?

1. Fruits: ___ 0-1 ___ 1-2 ___ 3-4 ___ 5+

2. Vegetables: ___ 0-1 ___ 1-2 ___ 3-4 ___ 5+
3. Bread, Pasta, and Carbohydrates: __0-1____1-2____ 3-4____5+

4. Meat and Protein: __0-1____1-2____ 3-4____5+

5. Milk, Cheese, and other dairy: __0-1____1-2____ 3-4____5+

6. Pop, Candy, and Chips: __0-1____1-2____ 3-4____5+

7. Fast food: __0-1____1-2____ 3-4____5+

8. What are your favorite foods?
   1. 
   3. 
   2. 
   4.

Psychosocial Skills:

1. On a scale of 1 to 10, 1 is very bad, and 10 is very good, how well do you feel about yourself on most days?

   0    1    2     3     4     5     6     7     8     9     10
   Very Bad 😞                               Very Good 😊

2. How do you feel about your body?

   0    1    2     3     4     5     6     7     8     9     10
   Very Bad 😞                               Very Good 😊

3. How much do you enjoy playing with other kids at school?

   0    1    2     3     4     5     6     7     8     9     10
   Do not enjoy 😞                           Very Much Enjoy 😊

4. How much do you enjoy playing with other kids after school and on the weekends?

   0    1    2     3     4     5     6     7     8     9     10
   Do not enjoy 😞                           Very Much Enjoy 😊
5. What activities do you enjoy most with other children and/or family (Check as many as you want 😊)?

___ Dress up _____________________________ ___ Computer Games ___ Board Games

___ Sports (Basketball, Volleyball and so on) ___ Movies ___ Video Games

Please list any other: ____________________________________________________________
____________________________________
April 14, 2009

Dear Lauren Tooman,

The Putnam County YMCA is pleased that you will be incorporating the program titled “Engaging Children in Healthy Occupations, ECHO.” This program will be a great resource to our branch.

This program will reach many children in our current membership base who need guidance and examples on how to lead a healthy lifestyle. We will support the research and implementation of the program by providing a facility and current structure to conduct research for implementation. Once the program is designed there will be space and program marketing tools provided to implement this program.

The Putnam County YMCA is excited and honored that you chose our branch to implement your program. Your knowledge and expertise in this area will help provide an innovative program to educate on healthy occupations to our current schedule.

Sincerely,

Carla Niese
Family Wellness Coordinator
Putnam County YMCA
Appendix I

Contact Information for Support Letters

**Putnam County YMCA Director**
Steven N Tomboni, President/CEO
101 Putnam Parkway
Ottawa, OH 45875
*Phone: 419-523-5233*
*Email: Stomboni@woh.rr.com*

**Putnam County YMCA Membership Director**
Brenda Micheal
101 Putnam Parkway
Ottawa, OH 45875
*Phone: 419-523-5233*
*Email:*

**Putnam County YMCA**
Tammy Schroeder
101 Putnam Parkway
Ottawa, OH 45875
*Phone: 419-523-5233*
*Email: tammy-pcymca@woh.rr.com*

**Governor Ted Strickland**
Governor's Office
Riffe Center, 30th Floor
77 South High Street
Columbus, OH 43215-6108
*Phone: (614) 466-3555*
*Fax: (614) 466-9354*

**St. Rita’s Healthy Eating & Exercise Program**
Danielle Oliver, RN

*Phone: 419-226-4594*

**Putnam County Health Department**
Joan Kline
256 Williamstown Road
P.O. Box 330
Ottawa, Ohio 45875
*Phone: 419-523-5608*
Fax: 419-523-4171

**Putnam County Primary Care**
Kathy Selhorst, CNP
19 E. Main Street
Leipsic, OH 45856

*Phone: 419-943-2130*

**Putnam County Educational Service Center**
Kathy Hartman, Gifted Education Curriculum Coordinator
124 Putnam Parkway
Ottawa, OH 45875

*Phone: 419-523-5951*  
*Fax: 419-523-6126*
ECHO sponsored by YOUR Putnam County YMCA:
 Where we build strong kids, strong families, and strong communities!

*Engaging Children in Healthy Occupations* (ECHO)

ECHO facilitator: Lauren M. Tooman, BS
Putnam County YMCA
101 Putnam Parkway
Ottawa, OH 45875
Questions? Phone: 419-306-9508
E-mail: lauren.tooman@utoledo.edu

Why ECHO?

* According to the Center for Disease control and prevention, over the past three decades the childhood obesity rate has:
  - DOUBLED for preschool children ages 2-5 years & adolescents aged 12-19 years old
  - more than TRIpled for children aged 6-11 years old.
  Overweight adolescents have 70 percent chance of becoming obese adults.

Get involved! Sign your child up for the ECHO program through your Putnam County YMCA! This program is one night a week for 8 weeks.

*Sign up sheets available at the Putnam County YMCA!*
Engaging Children in Healthy Occupations (ECHO) After-School Program

Who: Children kindergarten through sixth grade

What: A fun and interactive program that teaches children about healthy nutrition and physical fitness, while building self-esteem and social skills.

When: The ECHO program is a ten-week after school program. The children will meet once a week for two hours.

Where: Local schools in Putnam County

Child’s Name: Child’s Birthday (mo/day/yr.):
Parent Name: Signature:
Address:

City/State: Zip: Phone #:

Child’s School:

Please list any food allergies your child has:_________________________________

*Parents please note that you must attend the end of the week one and week eight sessions of the ECHO program. You are responsible for providing transportation for your child at his or her school throughout the ECHO program.

Questions/Comments:
Lauren M. Tooman, BS
(419) 306-0508 or LaurenTooman@gmail.com
Appendix L
ECHO program daily summary sheet

ECHO program Session # 1 2 3 4 5 6 7 8

Date:
Time In:_____
Time Out:_____

Number of children:_____

Nutrition Topic:________________________________________________________

Physical Fitness Topic:___________________________________________________

Psychosocial Skills Topic:_______________________________________________

Summary/Comments:_____________________________________________________

______________________________________________________________

______________________________________________________________

______________________________________________________________

______________________________________________________________

______________________________________________________________

______________________________________________________________

______________________________________________________________

______________________________________________________________

______________________________________________________________

ECHO FacilitatorSignature:_____________________________________________
Appendix M

Estimated number of hours per week for the ECHO program occupational therapy facilitator.

### ECHO Eight Week Program

<table>
<thead>
<tr>
<th>1 Week</th>
<th>Estimated time for preparatory tasks</th>
<th>ECHO program time</th>
<th>Documentation and office work</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>½ hour</td>
<td>1 ½ hours</td>
<td>½ hour</td>
<td>2.5 hours</td>
</tr>
<tr>
<td>Tuesday</td>
<td>½ hour</td>
<td>1 ½ hours</td>
<td>½ hour</td>
<td>2.5 hours</td>
</tr>
<tr>
<td>Wednesday</td>
<td>½ hour</td>
<td>1 ½ hours</td>
<td>½ hour</td>
<td>2.5 hours</td>
</tr>
<tr>
<td>Thursday</td>
<td>½ hour</td>
<td>1 ½ hours</td>
<td>½ hour</td>
<td>2.5 hours</td>
</tr>
<tr>
<td>Friday</td>
<td>0</td>
<td>0</td>
<td>3 hours</td>
<td>5 hours</td>
</tr>
</tbody>
</table>

Total estimated number of hours for one week = 15 hours

Estimated number of hours per week for the ECHO program break.

### ECHO Three Week Break Between Program Sessions

<table>
<thead>
<tr>
<th>1 week</th>
<th>Program Evaluation, Modification, Reading, and meeting with YMCA staff</th>
<th>Marketing and Recruitment of Participants at the YMCA and in the schools</th>
<th>Mailing, Calling, and Confirming Program Participants</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>1 hour</td>
<td>1 hour</td>
<td>1 hour</td>
<td>3 hours</td>
</tr>
<tr>
<td>Tuesday</td>
<td>1 hour</td>
<td>1 hour</td>
<td>1 hour</td>
<td>3 hours</td>
</tr>
<tr>
<td>Wednesday</td>
<td>1 hour</td>
<td>1 hour</td>
<td>1 hour</td>
<td>3 hours</td>
</tr>
<tr>
<td>Thursday</td>
<td>1 hour</td>
<td>1 hour</td>
<td>1 hour</td>
<td>3 hours</td>
</tr>
<tr>
<td>Friday</td>
<td>1 hour</td>
<td>1 hour</td>
<td>1 hour</td>
<td>3 hours</td>
</tr>
</tbody>
</table>

Total estimated number of hours for one week = 15 hours
Appendix N

**Occupational Therapist Job Description**

The Engaging Children in Healthy Occupations (ECHO) program at the Putnam County YMCA will employ an occupational therapist that has completed a minimum of a Master’s degree in the field. The individual must be registered and certified by the National Board for Certification of Occupational Therapists (NBCOT). The applicant must also be a registered therapist in the state of Ohio. The therapist should have a minimum of two years experience working with the pediatric population.

In order to effectively run the ECHO program, the occupational therapist will carry out and complete a number of duties specific to this role. The therapist will be responsible for marketing and recruitment of participants. The therapist will have sign up sheets (Appendix K) for the ECHO program available at the Putnam County YMCA and in the local schools. The therapist will be responsible for driving to the local schools, obtaining consent from the schools to pass out the sign up sheets (Appendix K), and collecting the sign up sheets. The therapist will be responsible for tracking the numbers and age groups of the children for each ECHO session. The therapist will also be responsible for mailing out information to the parents and children in order to inform them that they have a slot in the ECHO program, and that both the parents and the children must be present for week one and week ten of the ECHO program. The therapist will be responsible for planning each session, documenting the session, and making any changes to the ECHO program that he or she deems necessary. The therapist will also need to attend staff meetings at the Putnam County YMCA in order to periodically update the staff on the ECHO program. This position will require travel to the local schools that are served by the Putnam County YMCA. Reimbursement will be provided for travel expenses.
The occupational therapist will work approximately 15 hours a week for the duration of one year. The 15 hour work week includes times when the ten week ECHO program is in session as well as the three week break between ECHO programs (Appendix M). The occupational therapist will be employed by the Putnam County YMCA, and will report to Carla Niese, the Family Wellness Coordinator.
The Putnam County YMCA is seeking an occupational therapist who is looking for an exciting and rewarding opportunity to work with children. The Engaging Children in Healthy Occupations (ECHO) program is a newly developed program designed to actively teach children about healthy nutrition, fitness, and psychosocial skills. The Putnam County YMCA is located in Ottawa, OH. The YMCA is seeking an occupational therapist who is excited about promoting and teaching children healthy lifestyle habits. The program is designed to teach children healthy ODL’s (Occupation’s of Daily Living) (healthy eating), and IODL’s (Instrumental Occupation’s of Daily Living) (meal and snack plan and preparation), and motor skill development through fitness occupations. The program also emphasizes development of healthy self-esteem, body-image, and play skills.

An exciting occupational therapy opportunity—Applicants must be a registered occupational therapist with a minimum of a Master’s degree in the field. The therapist must have at least two years of experience working with pediatrics. The position is part-time, with travel to local schools. Reimbursement for mileage and benefits. Please send resume to:
Program Evaluation Survey

Branch: Parkview Family YMCA
Program: Summer Day Camp
Session: Summer 2007
Class: N/A
Survey #: N/A

Purpose: The purpose of this survey is to provide an avenue of feedback from program participants to YMCA program directors and management. This information will be used to evaluate all aspects of the program and identify areas where improvements are needed. All responses are confidential, please do not put your name on this survey. The YMCA is committed to providing quality programs to the community. Please take a few minutes to rate your YMCA program.

Instructions: This survey asks questions specific to the program listed at the top right of this page. Please think only of this program while you answer the following questions. Please be honest! This is your chance to improve your YMCA!

Section 1 - Demographics

<table>
<thead>
<tr>
<th>Participant's Age (circle one)</th>
<th>0-2</th>
<th>3-5</th>
<th>6-11</th>
<th>12-18</th>
<th>19-55</th>
<th>56-74</th>
<th>75+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zip Code</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity (check one)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is Participant a Member?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If so, at which branch?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st time in a YMCA program?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did you receive a scholarship?</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cover Sheet
<table>
<thead>
<tr>
<th>Section 2 - Program Environment</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 The facility was neat and clean</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 The location was convenient for me</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 The facility was appropriate for the program</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 The facility met the needs of the participants</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 The facility was safe</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Parking was adequate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Equipment and supplies were in good repair</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Enough equipment and supplies were available</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 3 - Health &amp; Safety</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 The facility was safe</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 The staff was safety conscious</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Safety procedures were evident and followed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Staff to participant ratios were appropriate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 4 - Connectedness</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 Instructor knew the participants names</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 The participant had fun</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 The participant made friends</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 The staff cared about the participant’s needs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 Staff cared about participants progress</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 5 - Leadership Quality</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 The staff was competent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 Staff modeled YMCA values</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 The staff had good interpersonal skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 The staff had good leadership skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22 The staff was organized, prompt, and professional</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23 The staff modeled positive responsible behavior</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 6 - Program Curriculum</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 The curriculum was well thought out</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 The participant learned new skills and/or information</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26 The participant demonstrated personal growth as a result</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27 Program activities were developmentally appropriate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28 YMCA values were evident</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Section 7 - Program Administration

<table>
<thead>
<tr>
<th>Number</th>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>The registration process was easy and efficient</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>My questions were addressed in a professional manner</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>I was given accurate information about the program</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>I was given as much information as I needed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>There was adequate ongoing communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Section 8 - Program Retention

<table>
<thead>
<tr>
<th>Number</th>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>34</td>
<td>If eligible, the participant would enroll in this program again</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>I would recommend this program to a friend</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>The program was a good value for the money</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>I would describe this as a &quot;quality program&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>This program is of higher quality than non-YMCA alternatives</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Section 9 - Mission

<table>
<thead>
<tr>
<th>Number</th>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>39</td>
<td>The YMCA’s Christian Mission was evident</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>I knew that scholarships were available for this program</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>The participant developed spiritually as a result of this program</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>The participant developed mentally as a result of this program</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>The participant developed physically as a result of this program</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>The participant was encouraged to be caring</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>The participant was encouraged to be honest</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>The participant was encouraged to be respectful</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>The participant was encouraged to be responsible</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>Participants had positive relationships with adult leaders</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>Participants had positive interactions with peers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>Instructors had appropriate expectations for progress</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>There was interaction with people from diverse backgrounds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>Participant developed higher self-esteem during program</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>53</td>
<td>Participants were able to participate in creative activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Any additional feedback about the program (you may use the back of this page if necessary):
Appendix Q

Objectives Record

An (x) will be placed in the box in the child has achieved a program objective. The box will be left blank if the objective is unattained.

**Week 1 ECHO objective record**

**Date:**
**Age Group:**

<table>
<thead>
<tr>
<th>Child’s Name</th>
<th>Obj. 1: Has the participant identified six goals in week 1 of ECHO?</th>
<th>Obj. 3: What is the total number scored on the psychosocial skills section of the self report, (questions 1-4)?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total number of x’s</strong></td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Percentage of group</strong></td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Week 8 ECHO objective record**

**Date:**

<table>
<thead>
<tr>
<th>Child’s Name</th>
<th>Objective 2: Has the child achieved at least three of the six goals he or she set collaboratively with the ECHO program facilitator by this week?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td></td>
</tr>
</tbody>
</table>
### WEEKS 1 and 8 ECHO Program Objective Results Record Sheet

**Date:**

<table>
<thead>
<tr>
<th>Child’s Name</th>
<th><strong>Week 1</strong></th>
<th><strong>Week 8</strong></th>
<th><strong>Obj. 4:</strong></th>
<th><strong>Obj. 5:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Obj. 3:</strong> What is the total number scored on the psychosocial skills section of the self report, (questions 1-4)?</td>
<td><strong>Obj. 3:</strong> What is the total number scored on the psychosocial skills section of the self report, (questions 1-4)?</td>
<td>Is there a total increase of points scored on the psychosocial skills section from week 1 to week 10?</td>
<td>Is the participant currently consuming at least two servings of fruit and three vegetable servings, (identified in self report nutritional intake questions 1-2)?</td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total number of x’s</strong></td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Percentage of group</strong></td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Was the objective met?**

| | 75%– | 75%– | 75%– |