DOW Distinguished Awards Sustainability Grant
Progress Report

Health Enrichment
Program for
Kids

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**Project Scope**

With a lack of preventative health knowledge, inaccessibility to means of a healthy lifestyle, and often limited role models for healthy living, children often lack a positive, permanent influence on their health, especially in such a critical time for habitual learning and growth. The goal of the Health Enrichment Program for Kids (HEPK) is to offer a holistic and interactive after school program that encourages a sustainable and healthy lifestyle for children at a young and malleable age. Our target group is kindergarten and first grade students, particularly of a minority and socioeconomically disadvantaged background. We choose to this target this population as the National Center for Health Statistics has repeatedly shown that the prevalence of obesity is higher among boys and girls whose parents or guardians had lower educational attainment.\(^1\) This early disparity has been found to affect adult life as lower socioeconomic and minority groups have reduced access to facilities, leading to lowered levels of physical activity and in turn increased levels of obesity.\(^2\)

What sparked our interest in creating such a program were the disturbing statistics about our nation’s youth. According the Institute of Medicine, one in five children are obese, students in grades K-12 receive an average of 4-6 hours of nutrition education per school year, and only 4% of elementary schools provide daily physical education.\(^3\) In addition to America’s increasingly sedentary youth, our nation’s healthcare finances are also disconcerting. It was estimated in 2008 that $147 billion of annual medical expenditures (9.1% of total medical expenses) were attributable to obesity.\(^4\)\(^5\) As childhood is a critical time for habitual learning and growth, our program aims to instill healthy behaviors in the children we serve, preventing the onset of obesity and accumulation of greater future medical expenses associated with disease in the Ann Arbor area.

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\(^3\) (2012) Accelerating Progress in Obesity Prevention. *Institute of Medicine of the National Academies*.


Our goal is to improve the quantity and quality of nutritional education children receive, as well as to increase the amount of physical education instruction they attain in their developmental years. Healthy behaviors we hope to instill include finding fun ways to remain active throughout one’s lifetime (such as walking, dancing, and yoga), choosing healthier food options, and living a sustainable lifestyle (such as planting one’s own garden, buying more local produce, and buying fewer processed snacks).

HEPK offers a holistic approach to healthy living centered on interactive techniques, as opposed to the common lecture-based teaching style that misses the mark of presenting material in a relatable way for children. Our program is facilitated by local college students from the University of Michigan, who construct interactive and sustainable activities, and who also act as potential role models for the children. Our program mentors students with the goal of making them "health literate," as the Michigan State Board of Education deems is necessary to be successful in school and the workplace.

HEPK works alongside The Peace Neighborhood Center, a local nonprofit whose mission is to provide programs for children, families, and individuals who are affected by social and economic disparities, and to help people discover options, enhance skills, and make choices that lead to self-sufficiency and positive community involvement. HEPK utilizes the organization’s facilities, general ideologies, and program goals when instructing and interacting with the kids. HEPK runs on a weekly basis, facilitating activities for kindergarten and first graders once a week at Peace Neighborhood. Each month focuses on one of four topics:

- A Lifestyle in Motion (Exercise)
- Healthy Relationships
- Diet & Nutrition
- Environmental Education

Perhaps the most promising aspect of HEPK and its sustainability is the volunteer base and students that fuel it. Students active in academia are perpetually searching for volunteer opportunities in addition to clubs or organizations where they can discover or express their passions. Additionally, students enrolled in schools of education or public health at a university
are interested in direct experiences to implement their ideas and passions that they invest everyday in their field of study. HEPK is a program that can rely on the sustainability of a constant flow of active young people in a university setting which allows for collaboration, recruitment, and passionate minds.

**Progress & Achievements to Date**

Since the establishment of HEPK in February of this year, our program has made tremendous progress and overall improvements. Our greatest accomplishment to date is receiving the DOW Sustainability Seed Funding. Without this grant, we would be very limited in the activities we can provide for our program, but it has allowed us to expand our activities and acquire materials and supplies that will last for many years to come.

The most difficult aspect of HEPK thus far has been engaging the children and teaching them in a short amount of time. Our program structure, content, and activities are constantly evaluated and reevaluated in order to ensure students are learning and having fun. Creating this program has taught us the value of asking for and utilizing critical feedback. The majority of our feedback came straight from children in the program, Students would express excitement, interest, and boredom verbally and nonverbally. After an activity was finished we would revisit the following week's plan to make edits to aspects of our lesson plans that were not efficient to teach our program themes. As an example, we began with lesson plans that included one activity for the duration of the program (45 minutes) facilitated by discussion between volunteers and students. We quickly realized that such lesson plans are not optimal for developmental learning for children of that age, and after trials, errors, and supplemental research, we have found that the best way to structure our program is with hands-on and interactive rotating stations. In addition, at the beginning of the program, we had a very difficult time engaging children's’ attention and encouraging them to follow the rules when they didn’t wish to do so. When we put a sticker reward system in place however—for each station that a child completes, they receive a sticker, and if they have all their stickers at the end of the lesson, they receive a small prize—kids were much more interested in the activity and willing to participate.
Among the 10 activities we developed across the semester, there were three activities which we feel best illustrate our program. One of the first activities we conducted was Life Long Active People (LLAP). The purpose of LLAP was to teach the children that being active is an important part of one’s daily life, and that there are activities they can do to stay active at nearly any point in their lifetime. Breaking the activities into stations, children rotated through four stations, one dedicated to yoga, dancing, walking, and “Simon Says Exercise!” In another successful activity, we focused on teaching kids the relationship between their body and exercising. We accomplished this once again by designating several stations for them to rotate through: a stethoscope station where kids could listen to their own heart and measure their heart rate, a coloring station where kids traced their body on a large piece of paper and colored in their heart, lungs, arteries, and veins, and an exercise station where kids measured their heart rate pre­and post-exercise. And yet another successful lesson plan was one focused on plants and the environment. For this activity, we had a station dedicated to labeling different parts of a plant, a station dedicated to attributing different fruits and vegetables with different parts of the plants, a “seed exploring” station where kids could hold and observe different seeds of common plants, and a “Where am I from?” station that taught kids which fruit and vegetables are grown in Michigan and those that are not.

Without the DOW grant, we would not have been able to make many of these changes to HEPK. We have been able to purchase basic office supplies to aid in the organization of our program and facilitate a more professional appearance. We have also acquired activity equipment such as yoga mats, cones, hula­hoops, and playground balls that will be imperative to encouraging kids to be active and have fun while doing so.

In addition, the grant as allowed us to purchase and implement the use of technological equipment such as iPad Minis, a Polaroid Camera, and Heart Rate Monitors that will aid in the children both learning and remembering what we teach them. The autonomy to purchase supplies such as iPads has increased the efficiency and legitimacy of our program in many ways. The iPads can act as a behavioral tool as a fun reward for children but also allow us to organize and structure our programs documents (activity plans, worksheets, etc.). This is essential in ensuring
HEPK’s sustainability as the constant flux of students can be a difficult factor in passing on information and the accessing important documents.

Finally, with the opportunity to increase our use of technology we are working with engineering and programing groups on campus to develop data-collecting apps in order to document progress of the students throughout the program in the form of simple and fun matching games. This encourages the collaboration of groups to work towards our goal of health education.

This grant has been imperative to the growth, development, and sustainment of our program for years to come; however, given the fact that HEPK is still a relatively new program, we have chosen not to apply for the additional funding through DOW. We hope to solidify the purpose, goals, and attributes of the program in the coming year. This past year has involved much trial and error, and we are grateful to have been able to experiment with different topics and activity structures. We have decided it would be best to firmly establish the program before we apply for or accept any additional funding.

The budget for all expenses reflected our initial predictions, save that of Craft and Activity Supplies. We have spent close to $4,000 of the total $5,000 seed grant as of the due date of this progress report. With the funds still remaining, we plan to use it to cover transportation costs, purchase additional office supplies, and buy activity supplies that we were unable to plan for in advance (as anyone who has worked with children before could agree, things can often occur last minute).

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Below are photos of our volunteers and kids that participated in the program last semester. While not a required part of the progress report, we wanted to share these to illustrate the investment of our volunteers and the interest and excitement we have received from the kids we worked with.