

Allegheny College Research Project Proposal
Crawford Central School District Board Meeting - November 14, 2016

Cultivating Food, Expanding Minds:
An Evaluation of Meadville's Garden-Based Education Initiatives
Submitted by Darby Anderson, Allegheny College Senior

Research Purpose: This study proposes to assess the impacts of garden-based education on the attitudes, behavior and knowledge of 7th and 8th grade students at the Meadville Area Middle School (MAMS). As part of a community wellness grant that was awarded to the Meadville community, the garden at the Meadville Area Recreation Complex (MARC) was built to provide students with experiential learning opportunities in the garden. This proposed research will evaluate the effectiveness of some garden-based curriculum at MAMS and is part of the assessment requirements of the granting foundation.

Participants & Curriculum: Participants will include students enrolled in the Family and Consumer Science class during the second quarter, November 4, 2016 – January 20, 2017. As part of the class, Wellness Programs Coordinator Taylor Hinton will facilitate a series of garden-based lessons during the roughly 10-week period. This is the second year in which the program will be offered and all program components are coordinated with the host teacher to meet regular class requirements. Students will go out into the garden, cook together, and discuss topics on food and nutrition. The purpose of these lessons is to empower students to make healthy decisions in regards to food purchasing, proper nutrition, and land stewardship, as well as providing hands-on experience gardening and preparing food.

Assessment Methods: I am seeking permission to administer an assessment survey before and after the students' participation in the class. The survey will be administered at the beginning of the quarter to establish a baseline and then again at the conclusion of the quarter; it will take students approximately 10 minutes to complete. Questions

asked (see attachment) will focus on students' general opinion of the class; knowledge gained about nutrition, agriculture/gardening and stewardship; behavioral changes with regards to purchasing, cooking and eating habits and their sense of responsibility to eat more healthy foods and towards the environment.

Research Protocols: The assessment survey is non-invasive, with no risks posed to participants because personally identifying information is not required to participate. Students will be provided a parental consent form with information about the study that must be returned before the survey is administered. Additionally, students will be asked to sign a student assent form and will have the option not to assent or to stop taking the survey at any point. The survey will only be administered to those students that submit both parental consent and student assent forms. The survey instrument has been reviewed by the Allegheny College Institutional Review Board, which is charged with reviewing and approving human participant research protocols. This project complies with Department of Health and Human Services (HHS) requirements, specifically the Code of Federal Regulations (CFR), Title 45, Part 46, and is conducted in accordance with the principles outlined in the Belmont Report.

Assessment Results: Results will be made available to administrators, teachers, and parents and will be shared with the original granting organization. The data collected will be summarized in my senior comprehensive project report and may be used to apply for future grants to improve and expand the garden-based learning program.

Questions or concerns may be directed to:

- Darby Anderson (Research Coordinator) 717-713-9620, andersond@allegheny.edu
- Dr. Benjamin Haywood (Faculty Advisor) 814-332-5347, bhaywood@allegheny.edu
- Taylor Hinton (Wellness Programs Coordinator) 440-532-1075, thinton@allegheny.edu

Student Pre-Survey

Identification # (first initial, birthdate, # of siblings) _____

Have you worked with Miss Hinton in the garden before this class?

What are you most interested in learning in the garden this term?

How much do you agree or disagree with the following statements?

1 – Strongly Disagree, 2 – Disagree, 3 – Don't Know, Don't Care, 4 – Agree, 5 – Strongly Agree

If I could, I would...

Eat more fruits and vegetables

Eat more freshly prepared meals

Eat less fast-food

Cook my own food more often

Grow my own food

Buy more local fruits and vegetables

Spend more time with friends/classmates cooking our own food

Right now...

I am happy with what I eat

I eat enough nutritious food

I feel healthy

I have the power to change what I eat

I do not have a choice in what I eat

I feel that I could start my own garden with my family

I know where to get local food

I think...

I am responsible for protecting the environment in any way I can

Hands-on learning in the garden is fun

Eating healthy is important

It is important to know where my food is coming from

That the way food is grown can negatively impact the environment

I am interested in learning about...

Agriculture

Nutrition

Stewardship

Gardening

On average, how many servings of fruits and vegetables do you eat per day? (1 fruit equals a serving of fruits and a ½ cup of vegetables equals a serving of vegetables)

0 – 1 servings

2 – 5 servings

6 – 9 servings

10 or more servings

In a normal week, how often does your family prepare meals together?

Everyday

At least 6 days per week

4-5 days per week

2-3 days per week

1 or less days per week

Does your family buy organic food on a regular basis if it is available? Yes or No

Define what environmental stewardship means to you:

Personal Information

What grade are you in?

7th

8th

Do you receive a free and reduced lunch?

Yes

No

Prefer not to answer

Student Post-Survey

Identification # (first initial, birthdate, # of siblings)

What was your favorite lesson taught by Miss Taylor this term?

Did you learn everything that you wanted to in the garden program?

How much do you agree or disagree with the following statements?

1 – Strongly Disagree, 2 – Disagree, 3 – Don't Know, Don't Care, 4 – Agree, 5 – Strongly Agree

I enjoyed...

Learning about gardening and agriculture

Spending time outside in the garden

Preparing food with my classmates

If I could, I would...

Eat more fruits and vegetables

Eat more freshly prepared meals

Eat less fast-food

Cook my own food more often

Grow my own food

Buy more local fruits and vegetables

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