



Letter of Agreement 2020-2021

The broad goals of this project are to increase awareness and understanding of natural systems, specifically our waterways, through an educational outreach program to schools and the public. This is accomplished using a replicable model for hands-on natural science and environmental education. Specific objectives are to:

- promote collaboration between Allegheny College and schools with a focus on natural science and environmental education;
- establish an ongoing water quality analysis project among college and schools that will lead to a new focus on scientific research for students at secondary levels;
- enhance "hands-on" science, and facilitate schools' efforts to meet project-based objectives; and
- broaden students' notions of stewardship for their watersheds, while providing the general public with information on water and land use issues.

Participating Teachers Agree to:

1. Attend the one-day Summer Institute (Teacher Workshop).
2. Involve a minimum of 20 students in the ongoing water analyses and interpretation (some programs may have fewer students).
3. Conduct the basic tests (provided) at their stream location (or in classroom) approximately every 3 weeks. Although sampling schedules are flexible, we do expect your stream to be sampled several times throughout the school year.
4. Send data to the project office in a timely manner so it can be posted on the website and shared with other classes.
5. Discuss the data with your classes. Encourage data comparisons between sites, trend analysis, and parameter comparisons, as well graphing exercises.
6. Have your students design and carry out at least one independent research project about a watershed topic (e.g., water quality, pollutants, watershed mapping, comparisons, watershed creatures, hydrogeology, water issues, or stream ecology). Research projects should involve as many students as possible. Stipend money can be spent on equipment to carry out these projects.
7. Bring participating students to the Student Research Symposium in April. Have students make at least 2 presentations (oral or display) of their water quality analysis findings or independent research projects.
8. Consider having your class present their research findings and displays to a non-participating class or community group.
9. Respond in writing to an end of the year survey to help evaluate the project and to suggest additions or improvements for the next year.
10. Ask your students to complete a voluntary before/after Creek Connections project evaluations.
11. Use Creek Connections staff and student assistants for resources and classroom assistance.
12. Encourage 9th, 10th, and 11th grade students to attend our summer camp (Freshwater Academy).

Creek Connections agrees to supply to Participating Teachers:

TEACHER ASSISTANCE:

1. Summer Institute (annual Teacher Workshop in early August)
2. Notification of workshop opportunities throughout the school year
3. Creek Connections assistance for research needs, resources, questions, concerns, class presentations, etc. All our staff will have background checks required for working with children.
4. Assistance in finding a stream field site near you. Your class will test a waterway as close to your school as possible, without duplicating any other school's current site.
5. Access to and priority for project loaner equipment.
6. Creek Connections will submit data gathered between March 22 & December 31 to World Water Monitoring Challenge organization.

BUDGET:

1. Stipend for chemical refills and glassware and equipment replacement. This money should be spent on chemical test refills, replacement parts, meters, and equipment. Any remaining money may be spent on supplies, books, classroom resources and other items to enhance watershed studies.
2. Display boards for creating Student Research Symposium presentations.

Minimal busing funds are available this year. Please let us know your needs. Please contact your administration for funds first. We will be happy to write letters of support to try to assist you in securing needed funds.

FLEXIBILITY:

This project does not give you a curriculum to follow. Instead, the water quality monitoring can become an ongoing lab or class topic, be done during an after school club, or a combination of all. You decide what works best for your teaching needs. We don't care how you do it, as long as your students collect data several times throughout the year, do independent research, and participate in some form at the student research symposium. In addition, sharing of research work with non-participating classes and community groups is encouraged.

Please sign below if you agree to these conditions:



Wendy Kedzierski, Project Director, Allegheny College

Project Teacher Signature

PRINT NAME _____

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| <p>Equipment Stipend This money can be spent on chemical test refills, replacement parts, meters, equipment, supplies, books, and/or classroom resources. (Money must be spent by May 1st; Orders sent to Creek Connections to place must be received by March 1st.)</p> | <p>~\$100</p> |
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