



Avon Education Foundation

APPENDIX

SAMPLES OF SUCCESSFUL GRANT APPLICATIONS

AVON EDUCATION FOUNDATION

GRANT APPLICATION COVER SHEET

Deadline: October 31, 2004

Please familiarize yourself with the Primary Grant Criteria and Funding Guidelines of the Foundation before completing the application. Complete the cover sheet, grant application and proposed budget for the project and mail one original and six copies to **AEF Grant Review Committee, P.O. Box 548, Avon, CT 06001**. *Thank you for your interest and creativity!*

Project Title: KidWind at Avon Middle School

Applicant's Name(s): Christopher Jones

If there is more than one applicant, who will serve as the Project Director? What, if any, specific qualifications do you have to direct the project?

n/a

Amount of Grant Funding Requested: \$ 1,000

Applicant's Address (preferred method of notification):

13 Halwood Dr, Granby CT 06035

Applicant's Email Address and Home Phone Number:

cjones@avon.k12.ct.us phone: 413-9416

Subject Area and/or Grades Taught:

Science, Eighth Grade

Applicant's School or Municipal Department:

Avon Middle School

The Foundation may also require additional information from the applicant including an interview with the applicant.

By signing below, the applicant hereby (a) agrees to complete a post-project evaluation for the Foundation, (b) and grants to the Foundation the right to publish the grant proposal and the results of this project if funded (c) understands that grant awards are subject to the rules and conditions of the Foundation, and (d) accepts that the decision on the acceptance of the project is in the sole and absolute discretion of the Foundation.

Applicant's Signature

Date

School Principal or Municipal Department Head's Signature for Approval of Project

For Internal Use

***Date Received
Application Number***

AVON EDUCATION FOUNDATION

2004-2005 GRANT APPLICATION

1. Project Title:

KidWind at Avon Middle School

2. Overview

In Avon's eighth grade science studies the central concept is the physics of energy. An important objective in the curriculum is that students demonstrate that the various energy forms can be converted from one form to another. It is proven that students at this age enjoy and flourish in their learning when it connects to their lives and the outside world. In addition, the learning is even more engaging to this age group when the topic is one that spurns debate in society-at-large. At present, the energy conversion concept is addressed, but no "project-level" activity exists to help reinforce the concept. A recently developed program known as "Kidwind" (see <http://www.kidwind.org>) has successfully provided schools with a hands-on, problem solving oriented project that involves student design and testing of miniature wind-powered electrical turbines. Because the learning is not just discussed, but is applied and targets many learning styles, this activity is in keeping with the objectives of the Avon Board of Education. It allows for students to become aware of the power generation source that saw the greatest statistical increase in its use in 2003 (35%) and one that is sure to continue to grow in light of the current world energy situation (to get a feel for Kidwind's aim see the attached sample activity)

<http://www.kidwind.org/pdffiles/bladedesign.pdf>

3. Goals and objectives

In starting this project the goals would be: 1) Have students connect energy forms to the broader concept of how energy can be converted from one form to another. 2) Have students apply scientific methods that are incorporated throughout Avon's science curriculum 3) Have students explore societal issues pertaining to energy demands and production, focusing on the distinction between renewable and non-renewable energy resources. Objectives will include, but are not limited to: 1) Have students use a "jigsaw" approach by having different cooperative workgroups use the scientific method to explore the variables that impact wind power generation. 2) Have students communicate their findings to rest of class. 3) Culminate the activity with a competition to build a turbine that successfully generates the highest amperage and voltage. 4) Tie in with ecology unit by having students research and write a critical stance paper concerning energy issues. According to Michael Arquin, founder of Kidwind, there is potential for future regional competitions of turbine designs that Avon's top wind turbine designers could enter.

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4. Plan of Action

Once funding is secured and equipment is purchased, equipment needs to be set up to ensure that it is functioning properly. The teacher writing this grant has already attended a workshop put on by Kidwind in February of 2005 so the specific needs and limitations of the project are realized.

5. Timeline

- Early fall: Order materials. Maintain contact with Michael Arquin, KidWind founder, to explore possibility of regional competition.
- Late Winter: Students build and test turbines and report on findings. Competition follows
- Early Spring: As part of Ecology unit, students write a critical stance essay concerning energy production issues of the present and future.

6. Collaboration

The teacher writing this grant will directly involve one-eighth grade team of students (around 90 students). The other two eighth grade teachers have expressed interest in sharing the equipment and having students perform similar tasks with it. It is common for the eighth grade science teachers to collaborate and adjust their scheduling so that equipment can be used on a rotating basis. The Avon Middle School will be the school involved. However, in the future, there can be opportunity for the eighth graders to mentor or present their work to elementary school students. The content can be presented at many different levels. The project is strongly oriented towards community betterment through environmental stewardship, so it has impact on the community.

7. Sustainability

The biggest cost for the program is the purchasing of the equipment. Once that is in place, costs are low and can be supported via science department funds and/or PTO funds.

8. Need

Given the Foundation's grant criteria, explain why you think your project should be selected and what needs it fulfills.

The project has high potential to be easily sustained. Organizations involved in this project concur that the biggest cost is getting the initial funding for the equipment. There is potential to broaden the number of students involved after a "pilot" year. The project has successful backing from experienced state and non-profit agencies. The project fits in perfectly with the curriculum and it would provide students the opportunity to employ troubleshooting techniques, perform scientific study, and develop scientific literacy. It will also give students a chance to explore the impact of technology and science on society.

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9. Total Amount of Grant Request

\$1,000

10. **Budget** -- On a separate sheet, provide an itemized budget for your project. (*The grant does not cover financial compensation to the educator for time spent on grant preparation and/or time to administer the grant.*)

11. **Are other funds available to support this project? Yes No**

The science department head is aware of long-term small funding needs.

12. Evaluation

Describe how and when you intend to evaluate the project. Are there quantifiable methods to monitor the success of your project?

Our present science curriculum uses a rubric for assessing lab reporting and the scientific investigation phase of this project will lend itself well to this rubric. The eighth grade teams also use a common assessment form for critical stance essays that is modeled after the CT CAPT test and this will be used for assessing the critical stance essays students produce. In addition, surveys of student attitudes towards the project will be employed.

10. Budget:

Breakdown of Finances:

50 Hubs	\$265
3 PVC Turbine Kits	225
200 -3/8" dowel	50
3 table fans	90
400 Balsa Wood sheets	200
Sandpaper	40
3 backup motor/generators	20
Several rolls of Good ol' duct tape	20
3 water pumps	<u>90</u>

Total **\$ 1,000**

AVON EDUCATION FOUNDATION

GRANT APPLICATION COVER SHEET

Deadline: October 31, 2004

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Project Title: Incorporating Salmon Egg Rearing into 8th Grade Science

Applicant's Name(s): Christopher Jones

If there is more than one applicant, who will serve as the Project Director? What, if any, specific qualifications do you have to direct the project?

No

Amount of Grant Funding Requested: \$ 934

Applicant's Address (preferred method of notification):

13 Halwood Dr, Granby CT 06035

Applicant's Email Address and Home Phone Number:

cjones@avon.k12.ct.us phone: 413-9416

Subject Area and/or Grades Taught:

Science, Eighth Grade

Applicant's School or Municipal Department:

Avon Middle School

The Foundation may also require additional information from the applicant including an interview with the applicant.

By signing below, the applicant hereby (a) agrees to complete a post-project evaluation for the Foundation, (b) and grants to the Foundation the right to publish the grant proposal and the results of this project if funded (c) understands that grant awards are subject to the rules and conditions of the Foundation, and (d) accepts that the decision on the acceptance of the project is in the sole and absolute discretion of the Foundation.

Applicant's Signature

Date

School Principal or Municipal Department Head's Signature for Approval of Project

For Internal Use

Date Received

Application Number

AVON EDUCATION FOUNDATION

2004-2005 GRANT APPLICATION

(Deadline: October 31, 2004; Mini Grants Only)

IMPORTANT: The Grant Review Committee will use a “blind” review process in evaluating each grant proposal. In order to maintain the integrity of the process, **DO NOT** include the name of any applicants in the following application. The grant application must include the information requested below and must be typed.

1. Project Title:

Salmon Egg Rearing in Eighth Grade Science

2. Overview

In Avon’s eighth grade science studies there is a section of study in Ecology. Much of the Ecology unit focuses on the Farmington River via a field study. A big focus in Ecology involves human impact on the environment. It is proven that students at this age enjoy and flourish in their learning when it connects to their lives and the outside world. In addition, the learning is even more engaging to this age group when they see their work as having a contribution towards society and the environment. A tried-and-true activity that involves students over the course of the year is to raise salmon in the classroom for release into a local waterway. Students take ownership in a living organism’s health and learn about the connection between the environment and the organisms in it. Because the learning is not just discussed, but is applied, this activity is in keeping with the objectives of the Avon Board of Education.

6. Goals and objectives

In starting this project, our goals would be: 1) Integrate ecology concepts with salmon rearing in a timeframe that continues throughout the school year 2) Spiral concepts from eighth grade physical science while students raise salmon. 3) Tie project in with existing Farmington River field study. Objectives will include, but are not limited to: having students succeed in raising the salmon without a high mortality rate, having the students work in conjunction with existing agencies like the Connecticut River Salmon Association’s School Program (see <http://www.ctriversalmon.org/schools.html>), having students perform writing and reading tasks in conjunction with US Fish and Wildlife’s “Adopt-a-Salmon Family” curriculum. (see: <http://www.fws.gov/r5cneafp/times.htm>)

7. Plan of Action

Once funding is secured and equipment is purchased, equipment needs to be set up to ensure that it is functioning properly. Contact with appropriate agencies needs to be established and teacher training must be undertaken. These agencies work every year with interested teachers in training, implementation and documentation.

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6. Timeline

This timeline is derived from guidelines provided by CSRA website, the agency which helps implement the program and presents a yearly cycle of activities:

- Late summer: CRSA to confirm participating schools
- Late summer/early fall: equipment ordered / purchased.
- September: notebooks to new teachers containing instructional and background materials.
- Early December: half-day seminar for new teachers.
- Before Christmas vacation: tank up and running.
- Early January: egg delivery.
- Mid-February: hatching.
- Late April / Early May: collection for stocking and release
- May/June: Farmington River Field Study

7. Collaboration

The project will directly involve one eighth grade team of students (around 90 students). The other two teams of eighth grade students may also be able to participate by viewing our project progress and by swapping classroom space. The Avon Middle School will be the school involved. However, in the future, there can be opportunity for the eighth graders to mentor or present their work to elementary school students. Because the project will incorporate state agencies and non-profit organizations, the population it indirectly affects is hard to pinpoint. However, the project is strongly oriented towards community betterment through environmental stewardship, so it has impact on the community.

8. Sustainability

The biggest cost for the program is the purchasing of the aquarium tank and chiller. Once that is in place, costs are low and can be supported via school funds and/or PTO funds.

9. Need - Given the Foundation's grant criteria, explain why you think your project should be selected and what needs it fulfills.

The project has high potential to be easily sustained. Organizations involved in this project concur that the biggest cost is getting the initial funding for the equipment. From there, the cost is low and outside organizations volunteer much support and free training for teachers. There is potential to broaden the number of students involved after a "pilot" year. The classroom space where the salmon eggs are located can be shared in a rotating fashion and younger students can be mentored and/or invited to see the project in action. The project has successful backing from experienced state and non-profit agencies and the project represents new learning in that it has not been implemented in the past in Avon's eighth grade ecology curriculum. The project fits in perfectly with the existing Farmington River Field study component of the curriculum and it would provide students the opportunity to employ troubleshooting techniques, community outreach skills, and scientific study. It will also give students a chance to have a positive impact on the local environment.

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10. Total Amount of Grant Request.

\$934

10. **Budget** -- On a separate sheet, provide an itemized budget for your project. (*The grant does not cover financial compensation to the educator for time spent on grant preparation and/or time to administer the grant.*)

11. **Are other funds available to support this project? Yes No**

If yes, please describe what efforts you have made to obtain such funds.

13. **Evaluation** -- Describe how and when you intend to evaluate the project. Are there quantifiable methods to monitor the success of your project?

Our present Ecology unit incorporates the aforementioned *US Fish and Wildlife's "Adopt-a-Salmon Family"* curriculum. The curriculum involves monthly mock newsletters and we integrate them into our ecology unit when doing the Farmington River Field Study. Because this project will involve a greater timeline as the salmon eggs develop and mature, students will read and respond (journal style) to the newsletters throughout the year. Having less of a "shotgun approach" to these newsletters will enable students to absorb the newsletters' content and students will relate better to the readings as they connect with their project work. In addition, surveys of student attitudes towards the project will be employed and students will still complete the existing Farmington River Field study report and field trip.

10. Budget

Breakdown of Finances:

1. Aquarium Chiller	\$600
2. 30 Gallon Aquarium	75
3. Emperor 280 Aquarium Filter	35
4. Filter cartridges	50
5. Foam	25
6. Aquarium Thermometer	10
7. Buckets/tubing/other maintenance items	25
8. Ammonia Test Kit	20
9. pH probe to use with existing PASCO unit	79
10. Siphon Kit	<u>15</u>
Total	\$934