

**2003 Intel Excellence
in Teaching
Award**



2003 Intel Excellence in Teaching Award

Introduction

The Intel Innovation in Education Initiative has contributed \$120 million worldwide to support the advancement of science, math and technology education and promote the understanding of the impact of science and technology on our lives. As part of their initiative, Intel is proud to sponsor the Intel Excellence in Teaching Award. This recently redesigned award not only recognizes teachers who have demonstrated excellence in the teaching of science but, by awarding a \$20,000 grant to the first place winner, also provides them with an opportunity to share their proven method of success with other teachers, students and administrators.

Applicants are asked to provide a proposal that demonstrates the success of an existing program and a plan on how to replicate and disseminate this knowledge within their school district, community, region, state or country. The award winners are then chosen based on the creativity and innovation of their proposal as well as it's potential impact.

Please see the enclosed materials for eligibility criteria and the application form. Entries must be submitted to the Intel Excellence in Teaching Award, Science Service, 1719 N Street, NW, Washington, DC 20036 by the **January 10, 2003 deadline** to be considered. These application materials are also available in an Adobe Acrobat Reader format via our websites at www.intel.com/education/ or www.sciserv.org/isef/teachers/tchaward.asp.

A maximum of 5 teachers are named as teacher finalists and receive an all-expense paid trip to the Intel ISEF as well as a \$1,000 cash award. Finalists provide workshops about their projects and are involved in special activities within the Intel Teacher Program. One finalist is selected at the end of the Intel ISEF to win a laptop, \$5,000 cash award and a \$20,000 grant to implement in their school district per their submitted proposal. For more information contact Ruby Kish, (202) 785-2255; e-mail rkish@sciserv.org.

2002 Intel Excellence in Teaching Award Finalists



Josette Biyo (First Place Winner)

Philippine Science High School Western Visayas, Iloilo, PHILIPPINES

Josette Biyo, a Science and Math Department Head at Philippine Science High School, submitted her proposal based on her Science Research 1 class which was designed to introduce Third Year High School students (Grade 9) to science and technology research. The goal of Science Research 1 is to equip students with basic research skills and involves field trips to research institutions in the region where students get an opportunity to interact with research scientists and observe different types of research. The students then come back to the classroom and learn how to conduct their own independent research projects. To replicate this process, and share these teaching methods with other science research teachers, Josette condensed the course into a three-day module entitled, "How to Conduct an Investigatory Project." This module allows her to share her techniques in teaching research with other teachers in the region.

Josette has shown extreme dedication to her science workshop by traveling across the country presenting her three-day workshop to teachers and students. This was often done of her own time and with very little funding. As the winner of the \$20,000 Intel Excellence in Teaching Award Grant, Josette's program will be able to reach more students and teachers and hopefully foster an increase in student independent research in the Philippines.



Julie Grady

Blacksburg High School, Blacksburg, Virginia

Julie Grady, sponsor of the Student Research Program at her high school, worked with the community to preserve 169 acres as the new Heritage Park and Natural Area in Blacksburg, Virginia. The goal of her project is to use the park as a learning tool for students of all ages. In her proposal, Julie explained that this goal could be achieved by gathering a group of Montgomery County Public School teachers representing grades K-12 to review existing successful and proven national science and environmental science curriculum so that they could modify and adapt the curriculum to the unique ecosystems and ecology of the new Heritage Park and Natural Area.

The project involves identifying two or three activities or projects per grade level that could be adapted to the Park and write the necessary teacher notes, guidelines and procedures specific to the property and then sharing that knowledge with teachers in the area. The goal of this project is to have students in Montgomery County begin annual school visits to the Park to work on inquiry based activities which may include long and short term research projects related to the biology, chemistry, physics, and geology of the ecosystem and ecology of the park.



Ernest Schiller

Central Lee High School, Donnellson, Iowa

Ernest Schiller, sponsor of the Central Lee High School Science Club for the past 25 years, has mentored many students with their independent research projects. He has shared this experience with students in his school and with other schools in the area. With evidence that reaching other schools can further promote successful student research, Ernest proposed a program that would include a teacher in-service on how to encourage students to develop independent research activities and investigations.

A key component of his program is to match teachers with community support staff and parents in order to facilitate and develop a personalized approach for the particular demographics of their school. The replication plan for this program would be through the collaboration of the state science teachers organization (Iowa Science Teachers Section) and senior science research mentors wanting to engage in science discussions in school science classrooms.



Susie Stevens

Latta High School, Ada, Oklahoma

As an active participant in coordinating her local science fair, Susie Stevens is a strong advocate for student independent research. One of her goals as a teacher and mentor is to increase students understanding of biotechnology and allow them to conduct experiments using the latest biotech equipment. With a former grant, Susie was able to equip her high school lab with the most modern DNA equipment and she watched as her students engaged in active scientific research studying DNA. The success of her students lead her to develop a plan to establish a mobile biotechnology equipment resource center that other science teachers from her region could access. Her proposal included a workshop to train high school biology teachers in Oklahoma in the latest biotechnology equipment available. In addition, her plan is to also teach them to use bioinformatics tools that can be accessed by the public via the Internet.

After receiving summer training, these teachers would schedule periods of time throughout the year during which they would use the equipment to teach biotechnology methods to their students. By acting in the role as a central purchasing, stocking, and monitoring agent, a great deal of duplication of the equipment, materials, and reagents would be eliminated and thus overall costs will be reduced.



Peiyu Ye

No. 2 Secondary School Attached to East China Normal University, Shanghai, P.R. CHINA

As a science teacher in China, Peiyu Ye saw a need for fostering student independent research, an idea rather foreign in traditional Chinese education. Peiyu developed a program to promote inquiry-based learning among students that includes discussions with top-ranking scientists in China, field investigations in various companies, and teaching her students how to conduct independent research.

In the implementation of scientific research, Peiyu encourages her students to do investigations in authentic contexts, actively identify problems, and propose scientific hypotheses. She also stresses the importance of cooperation among students and the interaction between teachers and students, as well as the interaction with the school, community, district and region. To disseminate this innovative method, Peiyu plans to use former successful student projects as case studies in a textbook and to ultimately create software to disseminate her method.

2003 Intel Excellence in Teaching Award Eligibility and Requirements

Eligibility

To be eligible, teachers must:

- Be actively teaching science or math in grades 9-12.
- Support students' independent research and/or competition in science fair.
- Be an individual teacher or a team (maximum of 3 teachers with a declared Program Manager who would travel to the Intel ISEF to represent the team).
- Submit a complete application by the January 10, 2003 deadline.
- Be available and released in writing by the school administration to attend the Intel ISEF from May 11-17, 2003 should they be named a teacher finalist. The school will be reimbursed for substitute fees associated with the applicant's absence.

Application Requirements

- Part I. Application Form
- Part II. Best Known Method Proposal and a Budget Template
- Part III. Letter and School District Support form from the appropriate school district official
- Part IV. Letters of Support from a student, a teacher, and an administrator
- Part V. Certifications of Applicant and Applicant's school administrator

Best Known Method Proposal

The Best Known Method Proposal is a proposal that outlines your innovative method, program or strategy that actively promotes inquiry-based learning by students. To qualify for this award the Best Known Method should meet the following criteria.

- 1) Program or method should focus on more than just a single topic of science.
- 2) Program or method should be currently in place and the proposal should demonstrate a clear-cut means of replication that will benefit an increased audience.
- 3) Program success should be demonstrated based on the overall success of the program and not individual students project's success.
- 4) The budget should not exceed \$20,000.
 - a) The budget may not include purchase of computer equipment or direct funding of a currently existing science fair.
 - b) The budget must be expended by the end of the following school year (2003-2004).
 - c) The school district must provide support of the budget via a letter and a School District Support form verifying that if won, the management of the funds would be provided through the school district.

DO NOT STAPLE

Last Name

2003 Intel Excellence in Teaching Award Part I. Application Form

Please type or print answers to all questions. Do not staple pages together. Entries must be received at Intel Excellence in Teaching Award, Science Service, 1719 N Street, NW, Washington, DC 20036 by the **Friday, January 10, 2003 deadline**. Applications cannot be e-mailed or faxed. Late applications will not be accepted.

A. Applicant Information

Applicant Name: _____
First Middle Last

Home Address: _____

City State Postal Code (Zip)

Province Country

Home Telephone: () _____ E-mail: _____

Soc. Security #: [][][] -- [][] -- [][][][] Date of Birth: _____
month/date/year

College Board Code: [][][][][][][] Public School: Private School:

School Name: _____

School Address: _____

City State Postal Code (Zip)

Province Country

School Telephone: () _____ School Fax: () _____

School Principal: _____

B. Classroom and Activities

Primary grades taught during the following school years:

2001/2002: 9 10 11 12 2002/2003: 9 10 11 12

Primary discipline taught: _____

Total number of years teaching: _____

Please describe other education-related activities in which you have been involved:

Part II. Best Known Method Proposal

- 1.) To present your Best Known Method Proposal, please answer the following three questions. Type your responses using the word count designated below. (double-spaced, 12 point font, no staples).
 - a) Describe your innovative method, program or strategy that actively promotes inquiry-based learning by students. (Maximum 500 words)
 - b) Demonstrate the success or results of the above with example(s). (Maximum 250 words)
 - c) Explain a plan for repetition and dissemination of the above in your school, community, district, region, state or country with the rationale and potential impact and reach of such a plan (Maximum 500 words)

- 2.) Please describe how the Intel Foundation Grant of \$20,000 would contribute to improving/expanding your Best Known Method. Please complete the budget template spread sheet on the reverse page and attach a written explanation detailing your budget ideas and explain any current funding sources.

Budget Template

Category Description	Intel Foundation Grant	School or School District	Other Funding (Specify)	GRAND TOTALS
Replication Staffing Costs				
Professional / Staff Development				
Substitute Teacher Time				
Equipment/Software (Other than computers or peripherals)				
Consumable Materials and Printing				
Curriculum Purchase				
Transportation				
Incentives				
Other Expenses (Specify)				
Total	\$20,000 (or less)			

Budget Template Definitions

- **Replication Staffing Costs:** Any costs related to hiring staff to manage the expansion of the program.
- **Professional/Staff Development:** Costs involved in training or teaching staff that will allow them to better contribute to your program. This includes teacher training courses, manuals or software.
- **Substitute Teacher Time:** Cost of substitute reimbursement if developing your program requires you or others working on the program to take time away from your classroom.
- **Equipment/Software:** Cost of any lab equipment, office equipment or computer software purchased to enhance the program.
- **Consumable Materials and Printing:** Costs associated with disseminating information for or about your program. For instance, cost of any office supplies that will need to be replenished such as paper, pencils etc. and any printing or photocopying costs incurred for the production of pamphlets, worksheets or brochures either needed for the program or to promote the program.
- **Curriculum Purchase:** Cost of buying curriculum, lecture notes, text books, etc. to be used for your program.
- **Transportation:** Cost of staff or student travel to and from the program location. It may also include personal travel as it relates to administering your program/method.
- **Incentives:** Cost associated with providing meals, snacks and other means of encouraging participants (prizes, t-shirts, etc.) during interactive portions of the program.

Part III. School District Support

Please have a representative of the school district complete the form below with a cover letter attesting to the district's support of your proposal should it be awarded. All materials must be received at the Intel Excellence in Teaching Award, Science Service, 1719 N Street, NW, Washington, DC 20036 by January 10, 2003 for the application to be accepted.

Name of School: _____

Name of District: _____

Name of Representative: _____

Title of Representative: _____

Mailing Address: _____

Email address: _____

Daytime phone number: (____) _____

I am an authorized representative(s) of the school and/or school district named in this application packet. I am specifically authorized to submit applications for grants and other awards on behalf of my school or district. I confirm that the above named school is a public school or an accredited nonprofit independent school that qualifies as a public charity under Section 501(c)(3) of the Tax Code (**IRS confirmation of tax status is attached**). I confirm that the plan and budget described in Part II of this application will be implemented as proposed, provided this entry is selected by the sponsors or their representatives for the award described in these materials. I understand that the award sponsors must approve any modifications to the proposed plan, in advance.

I (we) confirm that the information provided is complete and accurate to the best of my (our) knowledge. If requested, I (we) agree to give proof of information I (we) have given in this application. I (we) understand and agree that falsification of this information may result in repayment of any awards provided by the sponsor(s). Sponsors are not responsible for lost, late, mutilated, incomplete, illegible, or postage-returned applications or supplementary materials. All entry materials become the property of Science Service and will not be returned. I (we) understand that decisions of the judges are final.

Signature

Date

Part IV. Recommendation Form

As part of the application process for the Intel Excellence in Teaching Award, applicants are required to submit a letter of recommendation from a student, teacher, and an administrator. All recommendation letters should address your experience with 1) the applicant's program or method 2) the applicant's teaching methods, innovation and energy, and 3) the potential impact of the applicant's program or method on the school, community, region or country. Please feel free to use additional pages if necessary.

Position: Student Teacher Administrator

Name of Recommender

Signature

Date

Home Address

City

State/Province

Zip

Country

()

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Home Telephone

Work Telephone

()

Fax Number

E-Mail

Part V. Certifications

Teacher Applicant Certification

I certify that all of the information given in this entry is correct and has been completed by me. I further certify that I have read and fully understand the eligibility requirements and that I satisfy them. If selected as a finalist, I agree to travel to the Intel International Science and Engineering Fair to be held May 11-17, 2003 in Cleveland, Ohio.

I also hereby grant to Intel, Science Service, Inc. and their subsidiaries, affiliates and advertising, promotion and production agencies, and their respective assigns, permission to use my name and biographical information in advertising and promotional materials for purposes of advertising or promoting the Intel Excellence in Teaching Award. I acknowledge and agree that I will have no right of approval, no claim to any compensation, and no claim arising out of the use of my submission, name or biographical information in connection with the exercise of the rights granted to Intel and Science Service under this certification.

Signature

Date

Administrator Certification and Release

I have read the attached proposal and support this application. To the best of my knowledge, the work is that of the applicant. If this teacher applicant is selected as a finalist, I am authorized to release him or her from teaching duties so that he/she may travel to the Intel ISEF from May 11-17, 2003. I understand that all expenses will be covered, including that of the substitute fees associated with the applicant's absence.

Signature

Date:

Deadline for All Entries is Friday, January 10, 2003

Entries may NOT be sent via facsimile or email. Entries received after the deadline will not be accepted UNLESS 1) postmarked in a U.S. Post Office by January 3, 2003 OR 2) sent by a carrier that guaranteed in writing to deliver by the 11:59 p.m. EST deadline.

Mail Entries to: **Intel Excellence in Teaching Award**
 Science Service
 1719 N Street, NW
 Washington, DC 20036-2888

Intel

Intel Corporation, one of the world's premier technology companies, became the title sponsor of the International Science and Engineering Fair in 1997. Intel education programs are aimed at strengthening science, math, engineering, and technology education by improving the use of technology in the classroom, making access to technology easier and providing more opportunities for technical careers.

Intel's sponsorship of the Intel Excellence in Teaching Award is part of the Intel Innovation in Education initiative that has contributed more than \$120 million worldwide to support science, math, and technology education. For more information, visit www.intel.com/education.

Science Service

A non-profit organization, Science Service has promoted public understanding and appreciation of science through publications, outreach, and science education programs for the past 82 years. A 2000 National Science Board Public Service Awardee, Science Service provides the following programs and publications:

- ♦ *Science News*, an international weekly news-magazine, reaches over 200,000 subscribers and 1.2 million readers. A recipient of the George Polk Award for Science Reporting, *Science News* provides a weekly overview of all fields of science and science applications.
- ♦ *Directory of Science Training Programs*
- ♦ Intel Science Talent Search
- ♦ Intel International Science & Engineering Fair
- ♦ Discovery Channel Young Scientist Challenge

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