Iowa Science Teachers Section of the Iowa Academy of Science

February 15, 2006

Nadine Weirather, Editor

Contents of the ISTS e-newsletter that follows:

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A Message from your President:

Teaching as a Sacred Activity
by Michael Clough

As my term of ISTS President comes to an end, I want to thank you for the opportunity to have served you and the organization during the past year. I wrote in my candidacy statement when running for ISTS president that I wanted to revive the Iowa Science Teachers Journal. I am very pleased to have accomplished that goal and that ISTJ is now available for ISTS members. In my candidacy statement I also referred to teaching as a noble activity and wish to elaborate upon that view in this, my last, newsletter president's message.
Several years ago I received an e-mail from one of my students that directed me to a writing of Louis Schmier titled “Holiness in Teaching”. That piece, and many more of his inspirational writings regarding teaching, can be found at http://www.halcyon.com/arborhts/rt/98nov27.htm. Many of my former students have recognized my deep conviction that teaching is a very important undertaking. I trust they perceived this from the way I interacted with them and spoke about the responsibilities of teachers and schools, because I rarely stated explicitly that teaching is a sacred activity.

That changed a few years ago as I entered my 40s and became far less concerned about what others might think of me if I openly spoke about the sacred nature of teaching. As I often say to my students, growing old does have some advantages. However, I do wonder why speaking of teaching as a sacred activity raises so many eyebrows. Perhaps this suspicious reaction reflects our contemporary culture's overarching perspective that little, if anything, is sacred. Perhaps it reflects the low prestige (particularly at the university level) teaching unfortunately often receives.

Recently, No Child Left Behind has emphasized “scientifically based” education research, testing, and academic accountability, but it is silent on the moral aspects of education. That silence is deafening to those who see teaching as the sacred activity it can and should be. Those who have attended my conference presentations and workshops or read my published work know that I always emphasize the importance of research-based teacher decision-making. This is crucial for promoting a deep understanding of science content and other ends that characterize a well-educated individual. However, these outlets can scarcely convey the sacred nature of teaching and the passion I have for helping children grow to be happy, ethical, and productive people. That worries me because without commitment to the philosophical and moral aspects of schooling, research-based teaching becomes mechanical and detached from children. Without attention to the sacred nature of teaching, teaching becomes simply a job.

I am not seeking to place blame, only to bring to the forefront what makes a meaningful education worth having, and the sacred nature of teaching that brings about that kind of education. Children are far more than cogs in a future economic machine, and the sacred nature of teaching is far more than putting into place research-based strategies. Neil Postman argued in The End of Education that economic productivity alone does not provide a compelling justification for education. Nor does it provide a compelling rationale for the commitment that is required for effective teaching. The philosophical and moral reasons for education, and the sacred nature of teaching, are what compel teachers to put in the enormous time and effort (for which they are so unfairly paid) helping children grow to be all we want for them. Without that sacred perspective, little reason exists to learn and implement effective teaching practices _ to engage children in truly meaningful education experiences rather than simply convey information.

Natalie Goldberg wrote that anything done fully is a journey alone. If that is true, it is so only because so few people give fully of themselves. All of us have given our lives to become the person we now are. What we all wonder at times is whether what we have become was worth all
the effort. When teachers give fully of themselves, as so many do, teaching is a sacred activity. Those teachers never have to wonder whether their life is significant.

Some will say that I take teaching too seriously. I don't think that is possible and believe each of us, with great effort, can make a significant positive difference in the world. I hope you believe that about yourself and all those you touch. That attitude is the beginning of seeing teaching as a sacred activity.

**ISTS Fall Conference 2005 Re-Cap**

Congratulations all around for an outstanding 2005 ISTS Fall Conference! On multiple levels, the quality of science education in the great state of Iowa was enhanced by our growing community of professionals who convene each year for this giant science nerd celebration. Highlights include:

- The sessions of our many presenters were superior, as was the Keynote address;
- Our exhibitors lauded the conference as one of the best state conventions they attend;
- Conference attendance increased for the first time in years;
- ISTS left Des Moines in better fiscal shape than when we arrived;
- Our guest of honor, State Representative Carmine Boal, was most impressed with the professional atmosphere;
- Our conference-organizing team remains largely intact. Yea!
- Good lunch, with good company.

Iowa remains a national beacon of quality science education, and it's our collective responsibility to keep it that way. Let's reconvene, share our successes, and set ambitious agendas, next October in Cedar Rapids!

Jeff Weld, Past President and 2005 ISTS Conference Chairman

**Iowa Science Teachers Journal**

The second issue of the new electronic Iowa Science Teachers Journal is now available! If you haven't had a chance, check it out!! This issue contains five excellent articles and can be accessed at the Iowa Science Teachers Section URL: [http://ists.pls.uni.edu/](http://ists.pls.uni.edu/) or directly at [http://ists.pls.uni.edu/ISTJ/current/index.html](http://ists.pls.uni.edu/ISTJ/current/index.html)

The journal will be issued quarterly so that four issues will arrive during the school year when teachers are most likely to need and use ideas in the journal.
Announcements:

- **Dated Info:** Centers for Disease Control and Prevention’s (CDC) Science Ambassador Program

The Science Ambassador Program is a professional development program, in which selected middle and high school science teachers work with CDC scientists to develop science lesson plans on public health topics that meet National Science Education Standards. Selected teachers come to CDC for an intensive workshop led by CDC scientists (Workshop I: **June 12-16, 2006**, Workshop II: **July 17-21, 2006**). The workshop features a variety of sessions on public health topics, including presentations on folic acid and birth defects, epidemiology, surveillance, Alzheimer’s disease, and genetics. Teachers will work with one another and with CDC to create two exemplary lesson plans based on topics presented at the workshop. Once these lesson plans have been reviewed and published on the CDC and other educational Web sites, teachers will implement and evaluate them in the classroom.

We feel this is a great opportunity for science teachers to work closely with CDC scientists to bring new and innovative science materials back to science classrooms in your state. An application is due to CDC by **March 1, 2006**. This is a competitive program. If you have any questions, please feel free to contact the Science Ambassador Program at 404-498-4080 or scienceambassador@cdc.gov or you can visit our Web site at http://www.cdc.gov/ncbddd/folicacid/ScienceAmbassador.htm.

Sincerely,

Monica Montano
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- Time for microscope service??

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Iowa ISTS Microscope Sales & Service
Schedule Service by May 15, 2006 & Receive a 10% Discount

Scientific Specialties, Inc.
925 Millford St. - Cary, IL 60013
P/Fax - 847-639-6106
www.scientificspecialties.biz
• **Iowa Science Teachers Reminder:**

For the third year, the Iowa Energy Center is offering our NEED Summer Conference Scholarship to up to 20 Iowa teachers.

NEED Conference Schedule:
July 9 - 13, Denver, CO  
July 16 - 20, Cambridge/Boston, MA  
July 26 - 30, Seattle, WA

The Iowa Energy Center will pay for the conference registration ($1,000 includes hotel and conference materials) and all reasonable travel expenses (airfare, parking, meals outside the conference).

It’s easy to apply!! More information and the scholarship application instructions can be found at: [http://www.energy.iastate.edu/funding/NEED_index.html](http://www.energy.iastate.edu/funding/NEED_index.html)

Please share this link with other science teachers - applications are due March 6, 2006. Questions can be directed to me at swenson@energy.iastate.edu, (515) 294-4391.

Thank you!

Amy Swenson  
Iowa Energy Center  
Communications Manager

• **Message:**

Northwestern University (NU) and University of Michigan (U of M) are offering a unique professional development opportunity for environmental science teachers. Through National Science Foundation monies, NU and U of M have designed a research study to examine the different ways teachers learn in face-to-face workshops and on-line professional development communities. Through this study, NU and U of M have the opportunity to offer free professional development to teachers who adopt Investigations in Environmental Science.

Teachers who participate in this study will receive 48 hours of varying types of professional development along with a $1500.00 stipend upon completion. If interested in learning more about Investigations in Environmental Science or the Professional Development study, see [www.geode.northwestern.edu/ies](http://www.geode.northwestern.edu/ies). Any further questions can be directed to m-bruozas@northwestern.edu.

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• **INPUT NEEDED ON TEACHER PROFESSIONAL DEVELOPMENT NEEDS**

The American Psychological Association (APA) wants to obtain input from America's teachers about their professional development needs. APA's Teachers' Needs Survey, which has been approved by the University of Maryland Institutional Review Board, is gathering information about teachers' perceptions of professional development in several areas, including classroom management, instructional practices, classroom diversity, family and community outreach, and other teaching skills and knowledge informed by psychological science. The survey will help inform public policy as well as the creation of APA professional development courses for teachers based on the needs teachers identify. The survey will take about 10 minutes to complete and it is confidential. To protect confidentiality, data will be released in the aggregate only. Survey results will be available the PEN Weekly NewsBlast and on the APA website later this year.

If you have time, (And who does?), please take a moment to view the following link to the Teachers' Needs survey with PK-12 teachers nationwide: [http://surveys.apa.org/ed/teacherneeds2/](http://surveys.apa.org/ed/teacherneeds2/)

• **What is PEN? "Public Education Network"**

**Our Mission**
To build public demand and mobilize resources for quality public education for all children through a national constituency of local education funds and individuals.

**Our Guiding Principles**
- Public education is fundamental to a democratic, civil, prosperous society.
- Public schools are critical institutions for breaking the cycle of poverty and redressing social inequities.
- Education reform must be systemic to be effective.
- Public engagement, community support, and adequate resources are essential to the success of public education.
- Independent community-based organizations must play a central role in building and sustaining broad support for quality public education and for achieving significant reform in the nation's public schools.
- Parents and caregivers should be involved in all attempts to improve public schools.

Public Education Network (PEN) is a national association of [local education funds](http://surveys.apa.org/ed/teacherneeds2/) (LEFs) and [individuals](http://surveys.apa.org/ed/teacherneeds2/) working to advance public school reform in low-income communities across our country. Our network of local education funds (LEFs) operates in 34 states, the District of Columbia and Puerto Rico, serving 11.5 million students—that’s 22 percent of America’s public school population—in 18,000 schools in more than 1,600 school districts in low-income areas. In addition, PEN's international affiliates serve over 7,000,000 children in Mexico, Peru and the Philippines.
PEN seeks to build public demand and mobilize resources for quality public education for all children. PEN believes community engagement is the missing ingredient in school reform, and that the level of public involvement ultimately determines the quality of education provided by public schools.

• RAINFOREST WORKSHOPS - TEACHERS & STUDENTS TO THE AMAZON

Visit! http://www.travel2learn.com to learn about two exciting ways for teachers and environmental educators to travel to the Amazon Rainforest.

1. Sign-up for the 14th annual Educator's Amazon Rainforest Workshop on scheduled July 7-16, 2006! Co-sponsored by Selby Botanical Gardens, this 10-day event is a professional development opportunity for teachers to work side-by-side with a spirited faculty of scientists! Academic credit and an extension to Machu Picchu are available! The cost for this educator workshop is $1998, plus roundtrip airfare.

2! You can TRAVEL FREE during our 8-day Student Amazon Rainforest workshops on June 15, June 25, or July 5, 2006, while giving your students and their families the benefit of educational travel to one of the most diverse environments in the world! Bring a group of 6 and travel with all of your expenses paid! Experience a 1/4 mile Rainforest canopy walkway, get involved in a village service project, and see how indigenous cultures use the forest for medicine, food, and shelter! Land cost for students & families is $1798, plus air.

For expedition information or funding ideas call Dr. Frances Gatz at 1-800-669-6806, email fgatz@earthlink.net or visit the website http://www.travel2learn.com!

Environmental Expeditions, 9335 Fraser Avenue, Silver Spring, MD 20910
Frances Gatz, Ph.D., Director, Rainforest Workshops
Fax: 301-585-4899!!!! email: fgatz@earthlink.net!
Phone: 800-669-6806 or 301-585-7027

• American Stars Of Teaching

The U.S. Department of Education plans to honor outstanding classroom teachers through the American Stars of Teaching program. The Department's Teacher-to-Teacher Initiative is seeking nominations and information about teachers who are improving student achievement, using innovative strategies in the classroom, and making a difference in the lives of their students.

Teachers across all grade levels and disciplines will be honored this fall as 2006 American Stars of Teaching. Parents, students, colleagues, school administrators and others can nominate an exemplary teacher who they believe has the qualities to be an American Star of Teaching. One teacher will be recognized from each state. To learn more or nominate a teacher to become an American Star of Teaching, please visit the Teacher-to-Teacher Initiative Web site at: http://www.ed.gov/teachers/how/tools/initiative/index.html. All nominations must be completed by April 15. The U.S. Department of Education received more than 2,000 nominations for the 2005 school year. A list of past years' honorees can be found at: http://www.ed.gov/teachers/how/tools/initiative/americancars-teachers.html
• **NSTA Express Poll Indicates Widespread Support for National Science Standards, Curriculum, and Assessments**

A recent survey conducted in *NSTA Express* reveals strong support for national content standards in science, uniform assessments, and a national curriculum. The survey asked science educators if they thought a uniform set of national content standards in science that every state would be required to use is a good idea, and a resounding 71% said yes (27% said no). The results were similar when respondents were asked if they liked the idea of uniform national assessments (64% supported the idea and 34% did not) and a national science curriculum (73% supported the idea, 26% did not). To read a press release about the results, including comments from teacher respondents, go to http://www.science.nsta.org/nstaexpress/nstaexpress_2006_01_17_poll.htm

• **Studies in Air Quality for Science Educators**

The STORM Project at the University of Northern Iowa will be sponsoring a short course entitled "Studies in Air Quality for Science Educators" in June 2006. A primary focus of the course will be on the development, by participants, of classroom activities, lessons, or units on Air quality for middle and high school students. A subset of participants will have the opportunity to work with STORM in the following academic year to refine, for national dissemination, materials developed by all summer participants. A stipend will be paid for participation as will on-campus housing, meals, course materials, and some travel expenses. Details and application materials can be found at: http://www.uni.edu/storm/saqse2006/

Please share this information with other science teachers.

Alan Czarnetzki  
Professor of Meteorology  
University of Northern Iowa

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**Iowa Academy of Science Goals:**

• Promote research in the sciences  
• Promote public understanding of science  
• Improve instruction in the sciences  
• Disseminate scientific knowledge  
• Recognize high achievement in science and science teaching

**To attain these goals throughout the state of Iowa.**
Check out past issues of the ISTS newsletter at [http://ists.pls.uni.edu/newsletters/index.html]

Your ISTS Leadership Team can be found at: [http://ists.pls.uni.edu/officers.html]

(We are always looking for good people. Send an e-mail to jeff.weld@uni.edu if you wish to be more involved.)

**Invitation to improve/contribute to this newsletter**
How best can this newsletter serve you? Do you have something to contribute for the good of the ISTS membership? Zing a line at jeff.weld@uni.edu or nweirather@central-lee.k12.ia.us.