

WOW Program Design

The Wonders of Our World (WOW) program was founded in 1999 by The Ohio State University's (OSU) Chemistry professor Susan Olesik, to help improve schools' existing science programs through a collaboration of teachers and scientists. The WOW program has grown from a few dozen volunteers and one elementary school into the keystone elementary-school public outreach effort in science at Ohio State University.

WOW trains teachers and volunteer scientists to cooperatively implement hands-on science experiments in kindergarten through fifth grade classrooms.

- WOW introduces students to the excitement of science
- WOW increases science equipment available to teachers
- WOW fosters community involvement in school activities
- WOW engages professional scientists, university students, and faculty in local elementary school education

OSU WOW Team Leader teaches children all about bird nests



WOW Structure

- WOW volunteers visit each school for three years.
- Five to six unit topics are covered each year in monthly teacher workshops, followed by volunteer visits to the classrooms.
- Topics are aligned with Ohio's New Learning Science Standards
- OSU staff develop innovative, hands-on science experiments in their fields of expertise.

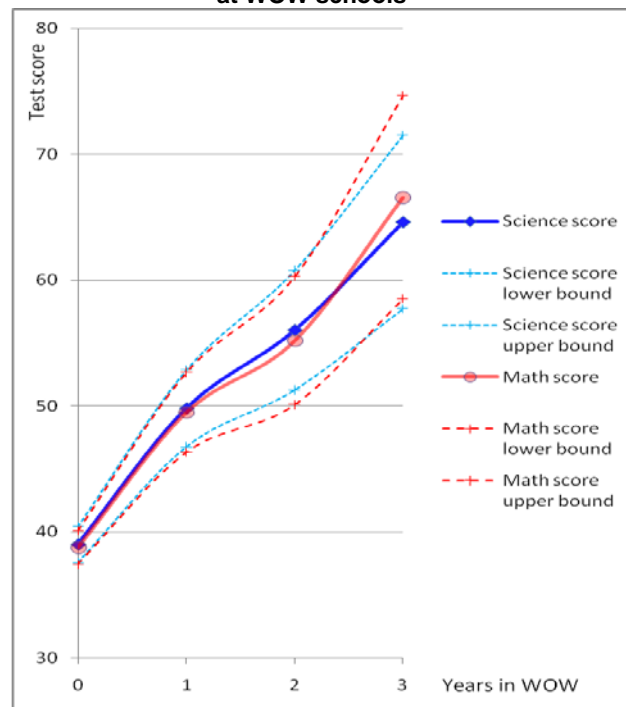
Outcomes

Progress of the WOW program is monitored in many ways. Results from the science portion of standardized tests (Ohio Achievement Assessment Test) are collected each year. Feedback from teachers and volunteers is analyzed and external evaluations are performed as well. Qualitative and quantitative data show WOW is making a positive impact on students, teachers and volunteers.

Indicators of WOW success:

- Students at WOW schools are more excited about learning science
- Elementary school teachers at WOW schools are using more hands-on science teaching methods
- Teachers throughout Franklin County request WOW experiments for their classrooms
- Experiments from the WOW website are being accessed by an average of 55,000 people from around the globe annually
- **Test scores at WOW schools are improving dramatically!**

Previous Passing Rates on the Ohio 4th Grade Science and Math Proficiency Tests at WOW schools



What and Who

WOW Topics

Topics for WOW are aligned with Ohio's New Learning Science Standards and local school district curricular objectives. The experiments are also designed to be fun and exciting to inspire enthusiasm for science in students and teachers alike. Each topic contains five to ten hands-on experiments and activities, and WOW brings volunteers to each school for five to six topics each year.

This upcoming year's topics:

Measurement
Meteorology
Magnetism
Electricity
Ecology

3rd graders get their clay boat to float through scientific method inquiry

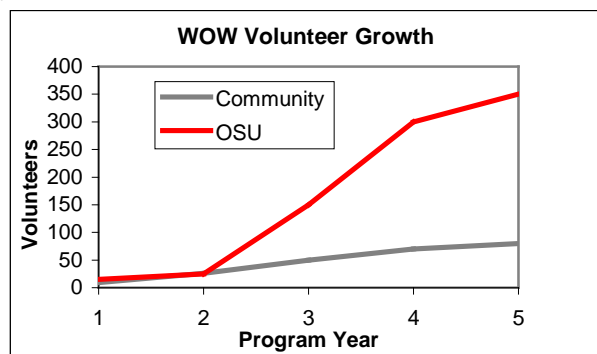


WOW Participants

To date, twenty-three schools in Central Ohio have participated in WOW. In addition, some schools have begun utilizing experiments from the WOW website, <http://wow.osu.edu> on their own. Currently, several hundred OSU undergraduate and graduate students volunteer for WOW, as do teams of professional scientists at Chemical Abstracts Service (CAS) and Battelle. WOW would not be possible without these dedicated volunteers or the support of the College of Arts and Sciences, CAS, Battelle, and all contributors to WOW.

WOW – A Growing Success

Since its inception, WOW has grown each year. The program inspired such enthusiasm for science at its founding school that news of WOW quickly spread. New schools and many new volunteers become involved each year.



The WOW program was designed for expansion – it is a model for scientists and teachers everywhere.

- Science faculty and students at Muskingum College in New Concord, Ohio began WOW activities in nearby Cambridge in 2005.
- Educators from school districts throughout central Ohio frequently borrow equipment from WOW for hands-on experiments in their classrooms.
- In 2006, a science academy in Singapore sent a teacher here to Columbus to learn from WOW! The WOW experiments are now used by Lewin Education, Singapore.

5th graders learn about pitch by listening to tuning forks



Wonders of Our World

*"I hear and I forget
I see and I remember
I do and I understand"*

Chinese Proverb



**"Never doubt that a few caring people
can't change the world. For indeed,
that's all who ever have."**

Margaret Mead

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Wonders of Our World

The Wonders of Our World program is a collaborative effort to enhance children's science education. Every month, over 200 volunteers from The Ohio State University, Chemical Abstracts, and Battelle visit elementary-school classrooms in Columbus, OH. These WOW volunteers bring exciting, innovative hands-on science experiments to 1000 children in three local elementary schools. By combining experiments developed by faculty with a group of dedicated professional scientists and OSU student volunteers, many elementary school children and teachers experience the wonders of science!



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<http://wow.osu.edu>