Science Olympiad

Inspiring the Next Generation of Scientists

For the past 28 years, Science Olympiad has led a revolution in science education. What began as a grassroots assembly of science teachers is now one of the premiere science competitions in the nation, providing rigorous, standards-based challenges to 6,200 teams in 50 states. Science Olympiad's ever-changing lineup of events in all STEM disciplines exposes students to practicing scientists and career choices, and energizes classroom teachers with a dynamic content experience.

Science Olympiad National Tournament champs from Ohio are congratulated by President Barack Obama in Washington, DC, at the White House Science Fair on October 18, 2010.

Urban Schools Initiative

"After participating in Science Olympiad and winning two medals at the Regional Tournament, I decided I wanted to major in science. This fall I will be attending Northeastern Illinois University majoring in Biology."

BRITTANY FIRSZT, STEINMETZ HIGH SCHOOL, CHICAGO PUBLIC SCHOOLS

Since 2006, the Urban Schools Initiative has increased minority participation in Science Olympiad by providing teams with membership, materials and extensive professional development. The program uses a stepping-up progression of events and a protected regional concept to support teams as they advance. At training workshops called "Build It Learn It Days" students work with experts from museums, universities and businesses to design and construct helicopters, study microbes and solve crimes using forensic techniques. Evaluation by the University of Illinois I-STEM Education Initiative found that a majority of students felt Science Olympiad helped increase their interest in science and STEM courses, and also increased confidence in their ability to do science.

Science Olympiad Urban Schools Initiative

Science Olympiad™
Exploring the World of Science

Science Olympiad is a national non-profit organization dedicated to improving the quality of K-12 science education, increasing male, female and minority interest in science, creating a technologically literate workforce and providing recognition for outstanding achievement by both students and teachers. These goals are achieved by participating in Science Olympiad tournaments, incorporating Science Olympiad into classroom curriculum and attending professional development workshops. www.soinc.org

Team Collaboration

Fulfilling a desire to bring excitement to science education and competitions, Science Olympiad was founded in 1983 by educators Dr. Gerard Putz and Jack Cairns. Currently, Science Olympiad holds more than 320 invitational, regional and state competitions, engaging 200,000+ students on 6,200 secondary school teams annually.

At the competitive level, elementary, middle and high school students with a knack for science have a chance to excel inside and outside the classroom. Secondary school teams advancing to state and national tournaments are celebrated at pep rallies, travel to major universities, make new friends and experience what it's like to be a star in the community. Individual medals and championship trophies for each division are awarded, with cash and tuition scholarship offers exceeding $11 million to date.

Science Olympiad Competition

Middle School Division B (Grades 6-9)
and High School Division C (Grades 9-12)

Much like a football or soccer team, Science Olympiad teams prepare throughout the year for tournaments. Each team is allowed to bring 15 students to participate in events in their skill set. Practices vary from monthly meetings to daily work as tournaments near, supported by an interlocking group of coaches, parents and mentors from the community, academia and industry. Science Olympiad competitions are like academic track meets, consisting of a series of 23 team events in each division. Annually, a portion of the events are rotated to reflect the changing nature of anatomy, physics, geology, astronomy, mechanical engineering and technology. By combining events from many disciplines, Science Olympiad encourages a wide cross-section of students to get involved in active, hands-on, group participation.

Elementary Science Olympiad

Elementary School Division A (Grades K-6)

Elementary Science Olympiad shows kids that science is fun, accessible and exciting, with 10,000+ elementary schools in the U.S. using Science Olympiad programs. Some hold Fun Days, where every classroom in the school becomes a hands-on science lab, or a Fun Night, where teams rotate through events staffed by local science professionals, parents and teachers. Some states even host district, regional or state competitions for grades 3-6, offering events like Animal Trackers, Don't Bug Me, Science Crime Busters, Pasta Bridge and Rock Hound. The elementary program is a great jumping-off point for Science Olympiad in the upper grades and a perfect way to enhance any school's curriculum.

Parents, PTA members and experts from the community share their enthusiasm for STEM careers at Elementary Science Olympiad events.

"Science Olympiad sparked my interest in science and technology. During my years with Science Olympiad, I learned that scientific challenges provide a unique, intrinsic satisfaction. After graduating with a Bachelor's of Science degree in Mechanical Engineering, I became a pilot flying military fighters."

RYAN HOWLAND, FIGHTER AIRCRAFT TEST PILOT, UNITED STATES AIR FORCE

SCIENCE OLYMPIAD™

Exploring the World of Science

Workforce Development

To strengthen real-world application of skills, Science Olympiad invites partners from industry, government agencies and associations to design and supervise events that provide links to the STEM pipeline. Organizations like Lockheed Martin, Texas Instruments and Centers for Disease Control provide volunteers, access to cutting-edge research and invaluable expertise to Science Olympiad teams, state organizations and local competitions.

Tova Peltz, a geotechnical engineer in Oregon, said participating in Science Olympiad events like Write It Do It gave her the training to develop construction plans and specifications, vital to her current job.

"Science Olympiad encouraged me to pursue a science degree and career. I'm convinced my participation in Science Olympiad is the main thing that got me into -- and prepared for -- college. I now coach two middle school teams on the South Side of Chicago."

CHRISTY PAGE, SCIENCE TEACHER,
GEORGE WASHINGTON ELEMENTARY, CHICAGO PUBLIC SCHOOLS

100% Aligned to Science Standards

All Science Olympiad events are aligned with current National Science Standards set by the National Research Council. Teachers seeking curriculum resources that illustrate standards in action have found success with Science Olympiad because it emphasizes the close relationship between teaching and assessment. Science Olympiad showcases a broad spectrum of events in 40+ professional development workshops across the US, including the Science Olympiad Summer Institute.

At all levels, girls represent more than half of all participants in Science Olympiad. Many have found that the teamwork aspect of Science Olympiad carries through their entire career.

Events Include:

DIVISION B EVENTS FOR 2012

Life, Personal & Social Science
Anatomy (Respiratory, Digestive)
Disease Detectives (Food Borne Illness)
Forestry
Microbe Mission
Water Quality

Earth & Space Science
Dynamic Planet (Earth's Fresh Waters)
Meteorology (Climate)
Reach for the Stars
Road Scholar
Rocks and Minerals

Physical Science & Chemistry
Keep the Heat
Optics
Storm the Castle
Crime Busters
Food Science

Technology & Engineering
Bottle Rocket
Mission Possible
Mousetrap Vehicle
Towers

Inquiry & Nature of Science
Awesome Aquifers
Compute This
Experimental Design
Write It Do It

DIVISION C EVENTS FOR 2012

Life, Personal & Social Science
Anatomy & Physiology (Respiratory, Excretory, Digestive)
Disease Detectives (Food Borne Illness)
Forestry
Microbe Mission
Water Quality

Earth & Space Science
Astronomy
Dynamic Planet (Earth's Fresh Waters)
Remote Sensing (Earth's Hydrosphere)
Rocks and Minerals

Physical Science & Chemistry
Optics
Sounds of Music
Chem Lab
Forensics
Protein Modeling
Thermodynamics

Technology & Engineering
Helicopters
Gravity Vehicle
Robot Arm
Towers

Inquiry & Nature of Science
Experimental Design
Fermi Questions
Technical Problem Solving
Write It Do It

Science Olympiad National Tournament

Attracting crowds of 5,000+, the Science Olympiad National Tournament is the pinnacle of team science competition. Hosts like The George Washington University, North Carolina State University and the University of Colorado at Boulder offer state-of-the-art facilities, superb faculty and a wealth of scholarship opportunities to the best and brightest students, recruiting the next wave of engineers, researchers and technicians to the STEM workforce.

UPCOMING NATIONAL TOURNAMENT SITES:

2012
University of Central Florida, Orlando, FL

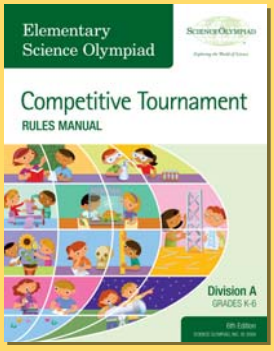
2013
Wright State University, Dayton, OH

2014
University of Illinois at Urbana-Champaign

2015
University of Nebraska, Lincoln, NE

"I definitely feel that my early involvement in Science Olympiad had an impact on my career choices. The preparation helped me immensely throughout my college and post-college career."

JEFFREY SILVERMAN, PhD STUDENT, ASTROPHYSICS, UNIVERSITY OF CALIFORNIA AT BERKELEY



ONLINE STORE:

Please visit **store.soinc.org** to order Rules Manuals, CDs, DVDs, Test Packets and other educational materials you can use to prepare for Science Olympiad tournaments and classroom instruction!

MEMBERSHIP For a complete listing of events, state websites and tournament information, or to learn more about becoming a registered member team, please visit our website.

Two Trans Am Plaza Dr., Suite 415
Oakbrook Terrace, IL 60181
(630) 792-1251 Phone
(630) 792-1287 Fax

www.soinc.org

SCIENCE OLYMPIAD™
Exploring the World of Science

2011-2012 sponsors make our mission possible!

PLATINUM SPONSORS:

UCF
THE UNIVERSITY of WISCONSIN MADISON
AIRFORCE.COM
ILLINOIS UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

GOLD SPONSORS:

ARMY ROTC
Combined Federal Campaign (CFC)
Texas Instruments
LOCKHEED MARTIN
FOX
FRINGE

SILVER SPONSORS:

CDC Centers for Disease Control and Prevention
DuPont Center for Collaborative Research and Education
Google

BRONZE SPONSORS:

Academy of Model Aeronautics
Chandra X-Ray Center
Delta Education
Investing in Communities
MAKE Magazine
Society for Neuroscience (SfN)
The Groundwater Foundation
VWR Education
VWR Foundation

STRATEGIC PARTNERS:

University of Illinois at Urbana-Champaign

I-STEM Education Initiative

BEST IN AMERICA — CERTIFIED BY INDEPENDENT CHARITIES OF AMERICA

APPROVED FOR LISTING NASSP 2011-2012 STUDENT CONTESTS & ACTIVITIES