



**The following are  
A World In Motion  
workshops/conferences scheduled  
for October and November:**

**October 6, 2005**

HENAAC  
Anaheim, CA  
Teacher Workshop

**October 13, 2005**

Dougherty County Schools  
Albany, GA  
Teacher Workshop

**October 15, 2005**

Georgia ITEA  
Savannah, Georgia  
Teacher Workshop

**October 26, 2005**

YES (Youth Engineering & Science Expo)  
Detroit, MI

**October 26, 2005**

Allison Transmission  
Indianapolis, IN  
Volunteer/Teacher Workshop

**October 27, 2005**

GM Training  
Warren, MI  
Volunteer/Teacher Workshop

**October 27, 2005**

Houston, TX  
Cast (Conf. for Advancement of Science  
Teaching)  
<http://stateweb.org/exhibits>

**October 29, 2005**

MDSTA (Metro Detroit Science Teacher  
Assoc.)  
Southfield, MI

**October 29, 2005**

Dayton, Ohio  
Teacher training

**November 4, 2005**

Warren, MI  
New Volunteer Training

**November 8, 2005**

Focus Hope  
Detroit, MI  
Teacher Workshop

**November 15-20, 2005**

NABSE (Nat'l Alliance Black School  
Educators) Conf.  
Renaissance Center  
Detroit, MI

## CANADA

It has been an exciting and challenging year for Mr. Tim Worthy's seventh and eighth grade students at Lancaster Drive Public School in Kingston, Ontario, Canada. The fall term always starts with an introduction and review of Scientific Method as well as the Design Process. The ability to integrate learning across the curriculum makes AWIM kits an excellent tool in our classrooms.

To "make it real" the grade seven classes build and test gliders, taking advantage of AWIM Challenge 3 – Gliders Kit. This is an excellent way to teach and review the principles of flight as well as allowing students to actually manipulate independent variables and to measure dependant variables. Hands-on learning is very effective and fun. The culminating activity is a book written by the students, which highlights student observations, consumer surveys (data management), instructions on building the specially designed gliders (procedural writing), and much more.

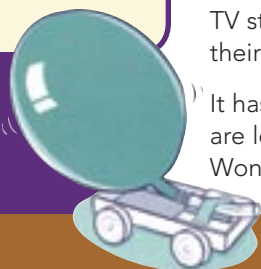
Eighth grade classes complement their study of mechanical efficiency by designing, building and testing toy cars using AWIM Challenge 2 – toy car kit. The groups compete to be the design team that wins the big toy contract from Mr. Big. The culminating activity is a demonstration of the finished prototype and a power point slide show demonstrating how their product meets the customer's needs and the design specifications. Students have been very creative and convincing in their sales pitches.

During the 2004-2005 school year, the top design teams from the grade eight classes were invited to travel to The University of Toronto Faculty Club in January and then to Ottawa in March to demonstrate their understanding and expertise. Their audiences were distinguished and attentive SAE section members and local stakeholders. The students also went "On the Air" on the morning show at a local TV station (The New R.O. ) with 2005 SAE President Ted Robertson to demonstrate their creations.

It has indeed been an exciting and rewarding year. With a new year under way we are looking forward to new challenges and adventures in learning. Won't you join us?



A student and SAE Canadian Board of Director Bruce Aubin at the SAE Ottawa Section Meeting. Mr. Aubin was the 1993 SAE President.





## Union, South Carolina

Through a partnership formed by Kathleen O'Connor and U.S. Representative Bob Inglis (Congressional District number 4 of South Carolina), SAE was asked to assist Union County Schools (Union, SC) in implementing the A World In Motion program into their classrooms. On Thursday, September 8th Matt Miller from SAE's K-12 Education programs traveled to Union, South Carolina and conducted a teacher workshop for over 15 teachers from Union County Schools. The teachers involved, who were released from their regular classrooms that day, ranged from grades 3 through 8 and received professional development training on AWIM Challenges 1, 2 and 3. Since the training, a number of teachers have ordered the kits and plan to teach AWIM in their classrooms this school year!

The following letter was received from

## Kathleen Carpenter "Ohio Teacher of the Year"

### Ada Exempted Village Schools, Ada, Ohio

First of all I want you to know that I have received A World In Motion Challenge 4. Please convey to all at SAE how very much I appreciate what all the challenges have meant to myself and my students. It has allowed me to create in-depth and inquiry-based programs for my gifted students. The Air Force Association has named me as Ohio's 2005 Teacher of the Year, and I owe this honor in part to SAE International for all the resources and activities they have given me. The Flight Challenge, along with grants from the Ohio Space Grant Consortium and the Martha Holden Jennings Foundation, had been instrumental in allowing me, as lead teacher, to collaborate with the other county Gifted Intervention Specialists to implement an aerospace program to celebrate the 2003 Centennial of Flight.

Again thank you so very much for all you do for our youth. Without your help I would not see the tremendous growth in my students from one year to the next not only in their creativity but also in their critical thinking skills. I just can't say enough to let you know how much good you are doing for educators, who work on sometimes extreme budget restraints and who so highly value all that they can get for quality programs for their students.

## California University Of Pennsylvania

On September 15th Professor Mike Amrein invited Matt Miller from SAE's A World In Motion program to serve as a guest lecturer for his TED500 course at California University of Pennsylvania. TED500 or "Teaching Technology in the Elementary Schools" is a class offered to seniors and juniors enrolled in C.U.P.'s Technology Education program. The presentation included an overview of SAE's role in serving the Mobility Industry as well as hands-on lessons on AWIM's Skimmer and JetToy activities which are designed for 4th and 5th graders. California University of Pennsylvania and SAE have a strong, longstanding partnership which was developed by Kathleen O'Connor, in fact, both Kathleen and Matt sit on C.U.P.'s Technology Education Advisory Board.

## ComVec

SAE will be hosting COMVEC (Commercial Vehicle Engineering Congress & Exhibition) November 1-3, 2005 in the metro Chicago area. During the reception preceding the banquet AWIM students will be displaying Challenge 1 and 2 completed projects to a host of on-and-off highway engineering professionals.

## SAE Dayton Section Activities

They may never become engineers, but these students from the Dayton area experienced the design process and learned how engineers use math and science to design and create. Now the concept of how an idea is conceived, tested, retested and produced is fixed in the minds of young students. The often asked question "What do engineers do?" has been answered for them.

Linda Hallinan and Sarah Schwab both from the SAE Dayton Section do teacher workshops and are involved with students at the elementary and middle school level.



## Philadelphia, PA

After much time was spent fine tuning their Challenge 2 vehicles, competitions were fierce as freshman AET (Applied Engineering Technology) students at Drexel University raced their assembled cars. Dr. Vladimir Genis uses the Challenge 2 project to provide students with a strong foundation of engineering practices and to stimulate students' interest by using a problem-solving approach.





## AWIM Program Staff

**Kathleen M. O'Connor**  
Manager K-12 Programs

**Matthew Miller**  
Program Developer  
K-12 Education Programs

**Kenneth Francis**  
Program Developer  
K-12 Education Programs

**Linda Cavanaugh**  
K-12 Administrative Assistant

**Darlene Geweth**  
K-12 Education Program Assistant

## You think teachers take the summer off? Think again!

In the Summer of 2005, hundreds of teachers received professional development through SAE's A World In Motion program!

### May 20, 2005

California University of Pennsylvania– AWIM Workshop involving over 20 pre-service and veteran teachers in CUP's Technology Education program.

### June 6-10, 2005

Southern Methodist University – "AWIM summer Institute"; Dallas, TX. Dozens of teachers from the Dallas-Ft. Worth area were provided with professional training on all 4 AWIM Challenges.

### June 16, 2005

Western Illinois University – NIMS (Northern Illinois Math and Science grant) Oregon, IL. Over 20 veteran teachers received instruction on AWIM through a grant received by WIU.

### June 17, 2005

Western Illinois University – NIMS (Northern Illinois Math and Science grant); Rockford, IL. Over 30 veteran teachers received instruction on AWIM through a grant received by WIU.

### July 13-16, 2005

SREB (Southern Regional Education Board) – "High Schools That Work" Conference; Nashville, TN. Over 300 teachers received training on AWIM Challenges 1, 2 and 3 through three open sessions offered at the conference.

### July 19-21, 2005

SECME (Southeastern Consortium for Minorities in Engineering) – SECME Summer Institute; North Carolina A&T, Greensboro, NC. Over 15 teachers received training on AWIM Challenges 1, 2, and 3 through an all-day session.

### August 30, 2005

HENAAC (Hispanic Engineering National Achievement Awards Corporation); Los Angeles, CA. Six Teacher trainers received training to utilize the A World In Motion in their Viva' Technology program.

## Meet the AWIM Staff



AWIM Staff:  
(From left to right) Matt Miller, Linda Cavanaugh, Kathleen O'Connor, Darlene Geweth, Ken Francis