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JetToy Streaks into Motion

Students in Tim Worthy's class at Welborne Avenue Public School, Kingston, Ontario, Canada, recently used the JetToy as their model when exploring a scientific method. The program held a great deal of excitement as they were given a design challenge to build their balloon-powered car. After construction of their prototypes, each team demonstrated how far their car would go by blowing up the balloon with a hand pump, then releasing it on a straightaway that had been outlined with tape on the floor. The JetToy and Skimmer manuals are now available in French for Canadian teachers.



Ready for testing before the competition



How far will my car go?

Hands-on Program Teaches Skills to Students

Emerson Elementary School students played the role of novice engineers for six-weeks. They have been applying their skills and knowledge gained through the hands-on *A World In Motion@* program. Azi Baig, a quality control engineer at the GM Pontiac Assembly facility, is one of ten employees who partnered with Emerson teachers to show how math, science and language arts are skills used in effective vehicle design. Students also learned about teamwork, quality control and market competition. Cynthia Rush, 5th grade teacher, said she appreciates GM helping to bring math and science alive for her students.

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SAE International and NSBE Expands SEEK Camps

Urban youth traded care-free summer days for a unique opportunity to pique their interest in science, technology, engineering and math (STEM).

After SAE International and the National Society of Black Engineers successfully piloted the Summer Engineering Experience for Kids (SEEK) Camp in 2007, one of the camp sponsors, the Battelle Foundation, recruited Honda of America Manufacturing Inc., to sponsor another SEEK camp in Columbus, Ohio this summer. The three-week day camp was for students currently in grades six to eight. Students engaged in two problem solving projects from SAE's AWIM® program, the Motorized Toy Car and the Glider.

A two-day training workshop was held in Washington D.C. for the National Society of Black Engineers (NSBE) members who were trained by the A World In Motion® staff from SAE International along with five contracted teachers. The NSBE members were to serve as mentors to the students at the SEEK Camps. SAE assisted in the general operations of both camps.



The D.C. camps attendance expanded this year. Two camps were held, one elementary and one middle school, each with up to 300 students, who gathered together to experience engineering through the A World In Motion program. The curriculum allowed participants to focus on the Skimmer and JetToy by utilizing several hands-on activities.

The SEEK Camps are a continuing partnership between SAE International and NSBE. NSBE is one of the nation's largest student-managed organizations serving African Americans in engineering and technology.



Skills Canada Builds on the Future

During a Student Activity Day pupils were introduced to the A World In Motion® with an emphasis on the Glider project. Tim Worthy, A Welborne Avenue Public School teacher, was contracted by SAE International to present AWIM® to young students during the Skills Canada. Hosted each May, Skills Canada, in Ontario, offers a variety of programs to impact changing perceptions and attitudes held by young people and their parents about careers in the skilled trades and technologies.



A World In Motion Makes Science Exciting for Students

Fourth and 5th graders at Girard Intermediate School planning careers in veterinary medicine, fashion design and entertainment, among many others, now have more to options to consider. A special thanks to engineers from Delphi Packard Electrical/Electronic Architecture and General Motors' Lordstown, Ohio complex, for bringing A World in Motion® into their classrooms.

Not only are the students learning about concepts such as friction, jet propulsion and air resistance, they are also learning to work together. In teams of three the students built JetToy cars and exchanged ideas about the best way to complete the project. Fifth graders in Chris Notareschi's class scrambled around the floor taking turns inflating balloons, using a ring to ensure that the balloons were uniformly inflated and measuring the distance traveled. They also timed and recorded the duration of each run.

In other classrooms, 4th graders carefully measured paper sails of various shapes, and figured the area each sail covered before attaching them to their Skimmers and sailing them across a table using wind generated by a fan.



The mentors from Delphi and General Motors explained to the class the different branches of engineering and what their jobs entail. The teacher noted that all of the students were very engaged. "Not only did the children learn about math, science and technology, they learned about careers in engineering that they may not have been aware of," said Notareschi.

A World In Motion is one of two recipients of the National Science Board's 2008 Public Service Award.

In all, six 5th grade classes and six 4th grade classes participated in the AWIM® program. It is the first time Girard Intermediate School has participated in the program. The plan is for it to become an annual event at the school.



The following are A World In Motion workshops/conferences/events for August and September:

August 27, 2008

Plymouth/Canton School District
Michigan
Teachers/Volunteers
Skimmer/JetToy
JContact: Janet Kahan
(734)416-3010



AWIM in Montana: Rainbows, Snow, a Thousand Miles, Couldn't Keep Instructors Away

Filled with excitement and energy, teachers from public and private schools, including remote, rural and reservation schools, attended a two and one-half day A World In Motion® training. The first was at the Montana Learning Center, at Canyon Ferry Lake, outside of Helena, while the second was at Miles Community College, in Miles City.

Both institutes were conducted in much the same manner by experienced AWIM® instructors, Edith Cranor-Buck, a former classroom teacher, and Dr. Georgia Cobbs from the University of Montana, Missoula. Participants began by building the Glider and launching it. After an in-depth look at the teaching materials and manuals, they moved on to team teaching the JetToy and Skimmer. The last portion of the workshop was devoted to designing and building the Motorized Toy Car. By sharing ideas and networking, teachers gained the insight for using the AWIM materials in any classroom, maximizing students' exposure to science, math, technology and communication in the real world. University of Montana credits or teaching certificate renewal credits were available. For information on the 2009 AWIM summer institutes, contact edithcranorbuck@gmail.com



To make a contribution to the SAE Foundation, visit their website at <http://www.sae.org>

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For consideration in a future issue please tell us what you are doing with AWIM in your classroom. Articles/photos should be sent to:

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