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Reading, 'Riting, 'Rithmetic . . . Robotics

AUSTIN, TX – NIWeek - August 8, 2006 - Today LEGO® Education announced a collaboration with four leading industry and academic experts that will bring robotics to the forefront of education worldwide.

Focusing on the latest in LEGO Education robotics, LEGO® MINDSTORMS® Education, the collaboration will partner LEGO Education with National Instruments, Tufts University Center for Engineering Education Outreach (CEEO), Carnegie Mellon University Robotics Academy, and Vernier Software & Technology to produce a continuum of robotics sets, programming software, sensors, and curriculum aimed at helping students learn essential science, technology, engineering, and math concepts.

“We've worked together for many years, but we haven't established a shared vision until now,” says Jens Maibom, General Manager of LEGO Education in Billund, Denmark. “We have an unprecedented opportunity to pool our resources, knowledge, and unique skills to produce the very best educational robotics tools – both now and for years to come.”

First launched in 1998, LEGO® MINDSTORMS® for Schools each year helps countless students grasp key concepts with hands-on, naturally motivating building sets, programming software, and curriculum.

Now with the next generation of LEGO MINDSTORMS Education, students have at their fingertips the latest in robotics hardware and software, along with future-relevant curriculum and new sensors – they’ll build stronger and smarter robots that more closely mimic real-world machines, all while preparing for life after school and careers in science, technology, and engineering industries.

“Robotics is not the end,” said Shoop, who directed the development of the LEGO MINDSTORMS Education NXT curriculum. “Our goal is not to produce a generation of roboticists; it is a means to produce a mathematically competent, technologically literate child.”
The new LEGO MINDSTORMS Education launched August 1. The MINDSTORMS Education software, an intuitive, icon-based drag-and-drop programming environment, was jointly developed by LEGO Education and National Instruments, and is powered by NI LabVIEW™.

The launch kicked off a series of joint development projects between the partners. With the multi-use LEGO MINDSTORMS Education building set as a touchstone, the collaboration will work together to create a series of software and curriculum products that will provide a complete robotics engineering experience for students in grade 3 through the university level.

Work with National Instruments will begin soon on data-logging software, as well as an educational version of LabVIEW for use with the NXT brick.

"In today’s technological world, the need for engineers and scientists is critical," says Ray Almgren, Vice President at National Instruments. “The educational software we develop today will help inspire students to pursue careers in engineering and science.”

Tufts, Carnegie Mellon, and Vernier will contribute curriculum spanning all grade levels and multiple science, technology, engineering, and math learning objectives. In addition, Carnegie Mellon will contribute C-based programming software for the NXT.

Recent studies show a distinct link between the use of LEGO Education robotics and the tendency of students to follow science and engineering career paths. Of the students who participate in FIRST LEGO League, a worldwide LEGO robotics competition, 59% want to pursue careers in science or engineering ("Evaluation of FIRST LEGO League." Brandeis University, 2004).

"Succeeding in a creative society requires critical thinking, teamwork, and communication skills that we know can be gained from robotics classes. We’ve seen how these classes motivate students to do better in school and go on to careers in science and engineering fields," says Maibom. “The software and curriculum provided by our partners are critical elements in that success, as it puts robotics into a real-world context and makes it much more than a toy.”

To learn more about the partners in this collaborative, visit their websites.

LEGO Education www.LEGOeducation.com
National Instruments www.ni.com
Vernier Software & Technology www.vernier.com
Carnegie Mellon University www-education.rec.ri.cmu.edu
Tufts University CEEO www.cseeo.tufts.edu

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