

NEWS RELEASE

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NASA TEAM UNVEILS VIRTUAL STUDENT ENGINEERING COMPETITION

HAMPTON, VA. – NASA is going virtual in its latest attempt to excite high school students about engineering and real-life design challenges facing future space explorers.

NASA's Langley Research Center in Hampton, Va., and Goddard Space Flight Center in Greenbelt, Md., are collaborating with the National Institute of Aerospace (NIA), USA TODAY Education in McLean, Va., and LearnIT-TeachIT in Washington, for the upcoming "RealWorld-InWorld Engineering Design Challenge." The competition offers high school students a unique opportunity to work with university students and engineering mentors in a 3D virtual world to solve authentic NASA-inspired, design-based engineering problems using 21st Century technology tools and skills.

"The first RealWorld-InWorld design challenge focuses on the James Webb Space Telescope," said Antoinette Wells of NASA's Goddard. "We plan to launch the premier space observatory of the next decade in 2014. Educators from NIA and USA TODAY worked with NASA education and outreach specialists to develop a competition that reflects a real challenge the project faces."

NIA's team developed the challenge into two phases. During the "RealWorld" phase, high school students use the engineering design process to develop possible solutions to one of two problems related to the Webb telescope. Once the "RealWorld" component is completed, teams may move into the "InWorld" phase. In a multi-user virtual world, developed by NIA, the team will expand to include engineering and information technology university students and an engineering expert. Working collaboratively, "RealWorld" groups will transform ideas into three-dimensional models and simulations. The top five teams will present their ideas during a special education forum.

The RealWorld-InWorld Engineering Design Challenge allows high school and undergraduate students an opportunity to work closely with engineering professionals using NASA science, technology, engineering, and mathematics (STEM) educational resources to deepen their understanding of STEM careers and NASA innovation.

In order to be considered for the InWorld phase of the challenge, high school students and their coaches are asked to submit their final RealWorld project solutions by December 15, 2010. Teams can register for the challenge by visiting, <http://www.nasarealworldinworld.org>. Registration for the challenge is free of charge.

"The goal of this competition is to inspire students to become engaged with STEM learning using the 21st Century technology that is part of their everyday life," says Dr. Bernard Grossman, vice president of education and outreach at NIA. "The experience will exercise both their science and math skills, and the creativity that is essential to engineering innovation."

The RealWorld-InWorld Design Challenge builds on two successful programs developed in collaboration with NASA: USA TODAY's Sight/Insight and the NASA/NIA Virtual Exploration Sustainability Challenge (VESC). USA TODAY's Sight/Insight program, developed in collaboration with educators and NASA professionals at Goddard, deepens students' understanding of STEM careers, project management, and NASA innovation. VESC, a modeling and simulation challenge, sponsored by Langley and NIA, teamed university-level engineering students with high school students to solve a NASA-inspired design problem within a virtual environment.

For more information about the RealWorld-InWorld Project, visit:
www.nasarealworldinworld.org

For more information about the National Institute of Aerospace, visit:
www.NIAnet.org

For more information about NASA, visit:
www.nasa.gov

For more information about USA TODAY's Sight/Insight, visit:
www.hubble-sightinsight.com