

How would your students feel about THIS... as their final exam!?

What is SystemsGo?

The innovative **SystemsGo Aeroscience Studies** science, technology, engineering, and mathematics (STEM) curriculum uses project-based learning to stimulate workplace skills in

- Design
- Development
- Testing
- Analysis
- Critical Thinking
- Cognitive Reasoning
- Problem Solving
- Innovation

Why should I have SystemsGo in my school?

- Proven, 4-year, sequenced curricula
- Meets STEM endorsement for your school
- · Courses align vertically within SystemsGo's mission

SystemsGo prepares workforce of tomorrow

- · Helps develop the most valued engineers to compete in the global market
- · Helps develop most skilled manufacturing workforce
- · Helps develop problem solvers and lifelong learners in any field
- 65% of students pursue engineering degrees

How does SystemsGo work in the classroom?

The Freshman and Sophomore curricula are designed to provide important

introductory information to the students, through user-friendly project and PowerPoint modules, that promote a student's understanding of innovation, the R&D industry, and work/life skills such as design and development, testing and analysis, problem-solving, leadership, and teamwork. The Junior and Senior curricula guides students to design, develop, test, and analyze professional-grade, free-flight, sounding rockets for research applications. First-Level (Tsiolkovsky) students design



and test vehicles to loft a one-pound payload to an apogee of one-mile. Second-Level (Oberth) students attempt transonic flight. And Third-Level (Goddard) students design and develop a vehicle capable of lofting a 35-lb payload between altitudes of 80,000 to 100,000-feet. Each year's projects culminate in a state-wide, professionally supported, launch event for all SystemsGo schools.



Do I have to be a rocket scientist to teach SystemsGo?

No. SystemsGo provides complete **CPE certified training** during the summer, and ongoing support from ordering program supplies to preparing for the rocket launches in spring.

Participating schools will receive all curricular and classroom support materials to ensure a successful experience for both teachers and students.

Who is using SystemsGo?

In 2014, hundreds of students from approximately 50 high schools in Texas size 1A to 6A are participating in SystemsGo, in addition six New Mexico High Schools are implementing this school year.

What are the results of integrating SystemsGo?

Documented findings from Texas Tech University 2014 Program Evaluation:

- Student ratings of the rocket program experience reach from extremely positive to near heroic levels of effectiveness.
- Students' evaluation of their experience with the program was very positive to extremely positive.
- The SystemsGo program, including its curriculum and learning effects, had a powerful and positive effect on students.
- SystemsGo is meeting and exceeding its stated objectives.
- 65% of students have continued on to study engineering in college. Many are in careers at major space related companies such as NASA, United Space Alliance, and Space-X.

"This is a program that is so completely effective across the breadth and depth of what it is trying to do. It is clearly paying off, and those involved deserve commendation for that. This evaluator believes the best reward should be additional resources for program expansion and replication." Hansel Burley, Ph.D., Texas Tech University College of Education

Who supports SystemsGo?

SystemsGo is supported by a consortium of leaders in government, business, education, the public and private grant industry.



What are industry, government, and education leaders saying about SystemsGo?

Texas Governor Rick Perry:

"One of my key educational goals is ensuring that Texas students have the science, technology and math education that makes them competitive in the global market place. SystemsGo is a first step toward meeting this goal because it will help prepare our teachers for this exciting and challenging opportunity."

Helen Reed, Ph.D., Dept. Head of Aerospace Engineering, Texas A&M University

"I have firsthand experience with the excellent students produced out of this program. This program is a visible example of successful efforts to improve education and develop the workforce."

Congressman Lamar Smith:

"...the most advanced high school rocketry program in the nation."

U.S.

Steven Collicott, Ph.D., Prof. of Aeronautics/Astronautics,Purdue University *"I can confidently state that the SystemsGo rocket program is the most amazing high school high-tech experience I have seen."*

Art Stephenson, NASA Administrator for Education: "Your work in supporting the students of tomorrow is unsurpassed in the ranks of high school science teachers. It has been said, 'The launch of a rocket does not begin at the launch pad, but rather at the classroom door.' You are demonstrating the meaning of that statement to all who observe your program."

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