



These boys and girls start a Lego project, recently, much like 14 Junior First LEGO League teams will be doing this weekend at the Lego Expo at the Mid-America Air Museum. This weekend will feature robotics projects in the competitions. Visitors from the community are invited to attend the Expo at MAAM. Admission is free. Courtesy photo

Air museum hosts free event

By RACHEL COLEMAN

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A program approved by USD No. 480 and the City of Liberal as the school year began will bear fruit this weekend, as the Mid-America Air Museum hosts a robotics expo for elementary-age students.

"We view this program as a major part of the museum's mission and purpose," said MAAM director Jim Bert. "That is, to serve the Liberal community."

The expo, set for 10 a.m. to 2 p.m. Saturday on the museum grounds, will provide a first taste of competition for 14 Junior First LEGO League teams from Liberal and eight surrounding communities. Students ages 6 to 9 will address the theme "Disaster Blaster," in which they look at ways STEM – Science, Technology, Engineering and Math — can help deal with storms, earthquakes, waves and other natural disasters.

About half the teams are comprised of students from USD 480 schools, which received base kits and team registrations as a gift from the city, via MAAM and a grant from US First. The materials provided students with a way to begin exploring the LEGO robotics program, which combines the familiar children's construction toy with beginning computer programming and science/technology concepts.

The hands-on program is designed to capture young children's curiosity and creativity, stated Bert in a press release, "and direct it towards discovering the possibilities of improving the world around them."

To accomplish this, Junior FLL teams examine a real-world challenge and solve it using research, critical thinking and imagination. Adult coaches and students work with LEGO elements and moving parts to problem-solve, then present the solution for review. The final result is a hybrid of math and science skills, public speaking and teamwork.

Students have embraced the Junior FLL program with enthusiasm because of the latter, Bert noted.

"They see it as a club," he said. "We look at it as an extension of the school day, because it teaches fundamental math and science concepts, it encourages teamwork and builds social skills."

Robotics for children has become a popular pastime in Liberal over the past three years, with teams popping up in various settings. A Liberal Girl Scout troop formed a team; home-educated students did so as well; Seward County Extension and the 4H program have also sponsored LEGO league activities in afterschool programs and in extracurricular settings.

The LEGO craze has spread to surrounding communities as well, thanks to efforts by Bert and the MAAM. Tyrone, Okla., Walsh, Colo., and Ulysses have been able to benefit from MAAM's programs, and Bert foresees more districts signing up for the competitive, educational activity.

At the weekend expo, Jr. FLL teams will demonstrate how they've solved a "Disaster Blaster" problem. To prepare, each group was required to explore a natural disaster in depth; research what is required to prepare for, respond to, or recover from the disaster; learn about simple machines through building a model made of LEGO pieces, with a motorized moving part; create a team poster to explain their findings. When the teams attend the expo, each group will share its experiences with evaluators and the public.

In competitive meets, LEGO league teams earn scores for the completion of the listed tasks, and interact with judges before final results are announced. Liberal's expo is part of an international "Disaster Blaster Challenge," in which more than 22,000 children from 12 countries will participate.

Bert said that while he oversees one local museum in one remote corner of Kansas, his dream for the LEGO league program is that it will provide "first class robotics program and learning experiences for all our area children."

Visitors from the community are invited to attend the expo at MAAM. Admission is free.