4-Hers build LEGO projects for fair

By Pam Chickering Wilson Union staff writer | Posted: Tuesday, June 28, 2016 9:51 am

LEGO LOVERS

JEFFERSON — You can enter a goat in the fair. You also can enter a home-baked pie, a jar of pickles or an apron you sewed. But did you know you can enter a LEGO structure?

Construction-minded youths have been able to enter their LEGO creations at the Jefferson County Fair for some time, but not until this year were there actually LEGO Project meetings with monthly engineering challenges, research and fieldtrips.

The LEGO Project actually is one of the most popular 4-H projects in Jefferson County, with around 80 youngsters enrolled.

The idea to hold organized project meetings originally came from Sarah Torbert, past Jefferson County 4-H youth development agent, who felt such a project would benefit through the creation of a group that would foster opportunities for learning, mentoring and youth leadership.

Torbert approached the mothers of two huge LEGO enthusiasts who have made ambitious LEGO creations in the past, and those women, Amy Hanson and Kim Buchholz, stepped up to lead the new group.

They looked into brain-building LEGO activities, and their sons, Matt Buchholz and Jacob Hanson, had lots of ideas for upcoming challenges and activities.

“We hadn’t done anything like this before, but both Kim and I felt we needed to do this for our kids and others like them,” Amy Hanson said. “Working together has been really good, because on nights I haven’t been available, she is.”

The group began meeting this spring, each month coming together to share members’ creations, engage in engineering challenges using LEGOs and to learn about the popular building toy. The leaders noted that youngsters need not exhibit a LEGO creation at the fair in order to participate in the group; all 4-Hers are welcome, from the grades K-2 Cloverbuds through middle- and high-schoolers.

“We didn’t have an organized project before, but a lot of people are interested in LEGOs,” said Matt Buchholz, 11, who serves as a youth leader with the group. “Some people don’t want to enter LEGOs in the fair because they’re afraid it might get stolen, but you don’t have to enter them in fair in order to come.”

The kids just liked LEGOs; the moms signed on because they believe it’s an educational toy that builds youngsters’ minds while they build fantasy scenes or structures from popular culture.

“LEGOs basically promote an engineering-based thought process,” Hanson said.

While LEGO “clubs” have sprung up in local libraries in the past several years, many of those just involve dumping out a huge pile of LEGOs and encouraging youngsters to build something to fit a general theme.

The 4-H LEGO Project meetings go more in-depth, with numerous solo and team-building challenges that encourage members to build and test various structures and re-engineer based on what they’ve learned through the initial process of trial and error.

“The point is to try things out and see if they work,” Kim Buchholz said. “I think they’re a really great toy. They really make you think.”

“This gives kids an opportunity to say, ‘I’m really good at this,’ and take their building up another level, or to say, ‘Maybe I should try something else,’” Hanson said.

A Sullivan mom whose son and daughter both participate regularly said she even uses LEGOs to help her kids visualize math concepts like multiplication, division and fractions.

At April’s meeting, members were asked to build a basket or other container that would slide along a dipping zipline and which would carry a LEGO figure without dropping it. The structures that held up and carried their figure upright along the whole zipline were ranked according to which was fastest.

Meanwhile, the older members were standing along the zipline, advising younger and less-experienced members on how to better balance their baskets.

One of the May challenges involved building the highest tower in a determined period of time. The younger children learned fast that they couldn’t just build straight up, but that they also had to plan for a bigger base in order to keep the tower steady.

The members themselves have generated several ideas for future challenges, such as a LEGO marble maze, a LEGO ramp for car races, a two-piece contraption that would serve as a sort of tool, and more.

Even though the group just has started meeting this year, Hanson said that it has attracted a great group of children — mostly boys and a few girls — who are excited about building and who enjoy bouncing their ideas off each other.

By watching and interacting with others, the youngsters learn different ways to achieve the same end. They also learn to modify their techniques to be more efficient, or their designs to more specifically fit the task they're trying to complete.

Meanwhile, members are challenged to learn more about different aspects of LEGOs.

In an early meeting, they watched a movie about the evolution of the company from a wooden toy manufacturer to the maker of the world's leading interlocking brick-based building toy. Later, 4-Hers were encouraged to research an aspect of LEGOs that interested them.

One member found out about all of the different forms the (human) mini-figure has gone through to get to its current permutation.

Another researched the cost of Harry Potter-themed LEGOs and figured how many weeds he'd have to pick to earn money to buy his favorite, while yet another investigated the priciest individual mini-figure (a solid gold C3PO, of which only two were ever made).

One more 4-Her looked into a certain line of LEGOs, while another learned about the move toward making sustainable LEGOs in the near future. Also a topic of interest was the appearance of female scientists among the new mini-figures, as women historically have been underrepresented both in the scientific field and in among mini-figures in general.

Matt Buchholz said that he has been building with LEGOs since he was 5. He started with sets and then branched out to make innovations of his own and eventually to engineer complex original structures. Among his favorites were "cliffhangers," which hung off the edge of furniture.

His June creation, completely original but incorporating portions of various sets and LEGO characters, was a multi-level Avengers action tower with moving parts.

The group's June meeting was its last for this 4-H year. To accommodate the upcoming county fair and family vacations, the group will not have any formal meetings for the rest of the summer, but the project will get rolling again in September, with plans already moving forward for lots of new activities in the fall.

One of these activities, which will stretch over several meetings, will involve 4-Hers writing their own LEGO "comic books."

"I was gifted some money from an extended family member toward a LEGO writing curriculum," Hanson said. "It takes the LEGO concept in a more educational direction, allowing kids to create scenes and write stories with LEGOs."

Her husband, Matt Hanson, explained that youngsters create scenes with the LEGOs, take snapshots of them, load them into a computer, add dialogue and text and eventually end up with a cartoon-style book.

Another potential activity for the coming year is an October fieldtrip to a LEGO Fest in Milwaukee, which features numerous challenges, massive LEGO structures, interactive displays and of course every imaginable type of LEGO.

In the meantime, fair-goers next month should be sure to check out the various LEGO structures that local 4-Hers have entered.