EXTENSION SNAPSHOT

Fulton-Mason-Peoria-Tazewell

I ILLINOIS Extension

COLLEGE OF AGRICULTURAL, CONSUMER & ENVIRONMENTAL SCIENCES

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Tracy Tomm, Havana Junior High science teacher is one of 30 educators who has participated in 4G STEM Camp Teacher Track over the past five years. The teacher track was created to extend the reach of STEM education to more youth.

Teacher engagement in 4G STEM Camp provides more vibrant STEM opportunities for students

4G STEM Camp is a University of Illinois Extension camp for middle school girls designed to introduce them to careers in science, technology, engineering and math (STEM) fields. It is an engaging and successful camp for the participants, but its capacity is only 35 girls. Because of this limit, Extension staff incorporated a teacher track as part of the 4G STEM Camp experience in 2015, to extend STEM education to more youth. Since that time, 30 teachers have participated in the 4G STEM Camp Teacher Track. These teachers came from schools in Peoria, Tazewell, Fulton, Mason, McLean and Knox counties, and through their follow-up STEM career exploration programming have reached over 750 students.

As part of the experience, teachers attended a pre-camp training focused on incorporating STEM career exploration into classroom activities. They participated in the week-long camp as both learners and mentors to the campers. They were encouraged to make connections with the host sites and reflect on ways they could incorporate similar activities with their students. After the week-long camp, the teachers planned some type of STEM career exploration activity with their students. Over the years, some of these activities have included: career days, gardening projects that incorporated landscape architects and surveyors, afterschool clubs focusing on STEM careers, STEM career exploration projects, and coding clubs highlighting technology careers.

The teachers who participate express being re-energized and inspired by the camp week and especially the connection with other teachers. One teacher from the 2019 cohort shared, "I truly enjoyed my experience working with the other teachers and the students. The day at Emiquon was an inspiration for me and the following day also allowed for collaboration time with the other instructors to find new ideas for the implementation of STEM curricula in my classroom." Research shows that this collaboration and support lead to the teachers feeling more



comfortable taking risks and expanding into STEM concepts outside their comfort zones (El-Deghaidy, et al. 2017). This, in turn, leads to an increased rate of success for the teachers implementing the program. McMullin and Reeve, in a 2014 study of Project Lead the Way, found that a vibrant teacher with a positive attitude towards STEM was the single most important contributor to a successful STEM program.

Incorporating teachers into the camp has not only improved the quality of the camp but also created a network of teachers making a significant impact in their schools.