



LOGAN HOMESHOW

Admission & Parking

PRESENTING SPONSOR:



MEDIA SPONSOR:



FRIDAY JAN 25 10AM - 8PM & SATURDAY JAN 26 10AM - 6PM • CACHE COUNTY EVENT CENTER • LOGANHOMESHOW.COM

NEXT UP

Indians fare well at district meet

Event titles were extremely hard to come by for Preston's track & field team...

Logan High students learn about DNA extraction

By Katie Peikes staff writer Mar 18, 2016



Start your 'News' Year off right! Get the Herald Journal for as little as \$9.97/month



A group of Logan High School students received a hands-on experience in DNA extraction through a partnership with Utah State University designed to interest students in STEM subjects and careers.

Following a general procedure, students from Shanda Wenger's biology classes extracted DNA from a leaf. The goal of the assignment was to teach students how to think like scientists, USU biology professor Paul Wolf said.

"It's enabling them to experience certain aspects of how science is done," Wolf said.

Wolf had the students extract DNA from an unknown tissue, enabling the students play the part of forensic scientists to figure out what the tissue was. After Friday's activity, the DNA will be brought to a USU lab to be tested.

"The important part of it is not learning about DNA, it's not learning how to use the equipment, it's more learning how to think like a scientist," Wolf said. "Trying to come up with a particular question or problem and solve it yourself, rather than following a list of instructions that the teacher gives you — the students ask the questions."

The DNA extraction was part of the USU STARS! GEAR UP program. It is a program funded by the state aiming to prepare students for college and stimulate their interest in STEM careers. Logan High is one of 17 selected schools included in the program.

Among the classes of the selected schools, Shanda Wenger's biology class has benefited enormously, Wenger said. Students tested birdseed to find out what it was made of. They have also tested strawberries, and are now trying to figure out a mystery substance through a cell lysis solution.

Students broke up the tissue, ground it up in a tube, added a protein precipitation solution,

vortexed it and centrifuged it to extract the DNA.

“It makes it real,” Wenger said. “It takes it off the textbook, off the computer screen, even off of a small-scale lab in the classroom and puts it into the real world.”

Ninth-grader Abraham Crowsin said while learning about DNA extraction, he learned it was a whole different process than what he initially thought.

“I thought it was gonna be you try to make it smaller and smaller until you’ve got the DNA, but it’s a lot just putting certain chemicals in and taking certain steps to break apart the cell, and then you single out DNA with your chemical,” Crowsin said.

While Crowsin said he is not necessarily thinking about a science career, the USU STARS! GEAR UP program has allowed him to further his interests.

Ninth-grader Andre Nguyen said he is passionate about pursuing a science-type career.

“It’s been my dream, my goal I guess,” Nguyen said. “I just was really interested in it and want to know how it works.”

On DNA extraction itself, Nguyen said he has learned a lot that will help him reach his goals of pursuing a career in science.

“Spinning the DNA fast enough to extract it has been pretty interesting,” Nguyen said. “I really like it and it’s an interesting subject.”

kpeikes@hjnews.com

Twitter: kpeik7

Tags

Logan High

Utah State University

Biology

Dna

Science

Usu Stars Gear Up



Katie Peikes

Katie Peikes is the Logan city reporter for The Herald Journal. She can be reached at kpeikes@hjnews.com or 435-792-7221.

Follow Katie Peikes