



East High School students Peyton Keech, Jessy Lin and Madison Davis measure landmarks of human remains to identify race, gender, age, height and more.

## Biomedical programs get a boost

By Shelly Miller

Students at Mankato Area Public Schools’ East and West high schools have seen an expansion in Project Lead the Way biomedical sciences programming through a grant and support from the Educare Foundation and Mayo Health System Foundation. The grant allowed the purchase of human bodies systems, dissection equipment and hands-on application of medical anatomy. It also provided new course opportunities including principles of biomedical science, human body systems and medical interventions.

Biomedical courses are in high demand and show records of success. A large percentage of jobs involve healthcare and the demand is increasing says Kim Mueller, career and readiness coordinator for Mankato Area Public Schools. “These courses give hands-on, engaging experiences into what real professionals do and provide authentic learning that inspires excitement,” Mueller says. “They help build critical-thinking and problem-solving skills which are important in the biomedical field.”

“The course provides specific hands-on skills experience for crime scene investigation, DNA studies or any healthcare profession,” says Greg Summers, biomedical teacher at East and West high schools. “Students learn about the human body as well as make connections between the body and themselves. For example, they may connect a nervous system unit with a family member with Alzheimer’s.”

Sarah Summers, biomedical teacher at East and West high schools explains the courses are fun. “Students experience super cool lab activities that apply to real life situations like a respiratory unit relating specifically to a student athlete and their sports performance,” “It really peaks their interest.”

## Tracking activity for heart health

By Edell Fiedler, public information

The Heart Zones System proved to be a successful pilot project at Mankato Area Public Schools’ Monroe and Rosa Parks elementary schools. Thanks to a \$32,000 grant from Educare, the Heart Zones System has been brought to Eagle Lake, Franklin, Hoover, Jefferson, Roosevelt, Washington and Kennedy elementary schools and Bridges Community School.



Brynn Stone, a student at Rosa Parks Elementary School, shows where a heart zone band is placed.

The Heart Zones System, which uses fitness technology and wearable devices, is used during physical education classes to monitor students activity levels.

Feedback shows heart rate range which is identified by color: blue (resting); green (light activity); yellow (moderate activity); and red (vigorous activity). The system also counts students’ steps. Combined, the tool’s features help students become aware of how important it is to be active and what it takes to get their heart rates to a level that can help them be stronger and healthier.

“The earlier we can teach heart health, the more students can reflect and hopefully make good decisions about their health and activity levels,” says Dianne Johns, physical education teacher at Franklin Elementary School. In addition to Educare, Johns shared that parent teacher organizations and staff were important to helping the Heart Zones System become a reality.

For more information contact Dianne Johns at [djohns4@isd77.org](mailto:djohns4@isd77.org) or 507-345-4287.

## Hands-on experiences

By Sara Gilbert Frederick

When students go into the digital fabrication labs at either West or East high school, they eventually come out with something they’ve created.

“Students are able to design, build and test products that they create,” explains Mark Zenk, a Technology Education teacher at West. “They print them with a 3D printer, cut them out with a laser and add signage with the vinyl cutter.”

Zenk and Dave Stahl, who teaches Technology Education at East, were able to enhance the equipment their students use thanks to a \$3,800 grant from Educare. The dollars allowed them to purchase vinyl cutters, which create new opportunities for creativity in the classroom.

“This new equipment also opens the door for interdisciplinary opportunities,” Stahl says. “Students taking classes in other disciplines can collaborate with our engineering students on projects in areas such as math, science, foreign language, music and art.”

The hands-on experiences prepare students for both college and careers. “Students need to be able to understand how things are created and built,” Zenk explains. “Providing hands-on experience in high school will make them all the more rounded upon graduation.”



West High School student Terry Moore loads vinyl into the vinyl cutter while working on a project.

## Superintendent Sheri Allen inaugural recipient of Leadership Pathfinder Award

The Martin Luther King, Jr. Commemorative Board honored Mankato Area Public Schools’ Superintendent Sheri Allen with the Leadership Pathfinder Award. The inaugural recipient, Allen was recognized for significantly moving Mankato Area Public Schools in the direction of Dr. King’s dream of an inclusive and diverse community, relationships with all.”



Superintendent Sheri Allen

