



News release

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Media inquiries: Lee Colony 262.564.2512

262.359.0798 (cell)

**Gateway Fab Lab continues designing,
working on PPE and health care pieces to help front line workers**

Gateway Technical College's Industrial Design Fab Lab staff members have been busy testing, modifying and producing equipment that can be used by first responders and others on the front lines of fighting the Coronavirus (COVID-19) pandemic.

Fab Lab staff members John Zehren and Adam Reed moved 3D printing machines and materials to two alternate locations just as the college shut its buildings in March and have stayed busy since then by designing and testing personal protective equipment (PPE) products.

"In this time of national crisis, we need to come together to do what we can for our local community," said Matt Janisin, vice president, Gateway Business and Workforce Solutions. "We have the talent, the resources and products to help emergency responders, and we are doing what we can to see specifically in what areas we might be able to support them."

One design that has gained traction and is being used by area nurses is an "ear saver," or surgical mask tension release band. Medical professionals are now required to wear masks for an entire work shift, which are looped behind the

ear and become painful after long hours of usage. Bands are worn around the back of the head and become a place to hook the masks on rather than the ear, taking pressure off the ears while still creating the needed tension to seal the mask on the wearer's nose and mouth.

The design is approved by the National Institutes for Health. Reed, Gateway's Fab Lab technician, has already produced 80 ear savers for an area hospital and will produce more in the upcoming weeks.

Reed said he got the idea for the bands from a family member who's a nurse, who saw the design on a Boy Scout Troop Facebook site. The Troop was producing them for area health care professionals, and she reached out to Reed to see if he could produce them for nurses at her Kenosha hospital.

"I thought, 'Yes, this is something I can do to support area health care workers,'" said Reed. "I ran a couple of tests to make sure I had it right and to see how long it would take. I figured out I could make them for about 11 cents in materials each and make 18 an hour.

"After initial testing, the first 80 were picked up, sterilized and are being used."

Reed points out the NIH offers designs on its website for those with access to 3D printers who want to also support area health care and front line workers by making PPE gear.

Zehren, Fab Lab coordinator, and Reed started their work in late February on two project designs, a mask and face shield, which are being looked at by

health care officials to see whether they can be used during this emergency. They continue with their design work on those pieces.

They've produced 94 face shields to be used and can quickly ramp up once those are approved by area health care professionals. Some respirator-style masks yet to be cleared for medical use are still being deployed as pieces for emergency responders to train on during this time of pandemic.

Gateway Technical College's mission is to deliver industry-focused education that is flexible, accessible and affordable for our diverse community. The college collaborates with communities in Kenosha, Racine and Walworth counties to ensure economic growth and viability by providing education, training, leadership and technological resources to meet the changing needs of students, employers and communities.

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