As the Stay-Home, Stay Safe executive order took effect, teens took to social media challenges to share their thoughts about social distancing behaviors.
As news reports of health care workers treating COVID-19 patients without personal protective equipment (PPE), those with the skills and equipment jumped to the call to make equipment.

Ronald (RJ) Fillmore 11 started printing masks at his home with two of the printers Panther Powered 6591's printers according to science teacher Bryan Tasior.

The two devised a system in which Tasior delivered plastic filament to Fillmore and picked up masks to take them to a designated larger group for assembly, sterilization and delivery.

The FIRST robotics team partnered with the Holt and Mason teams, as well as East Lansing Public Schools, TinkrLAB and a few others on an initiative called Print Force.

"We are using our 3D printers to make PPE and other equipment for area hospitals including masks and face shields," Tasior said.

To meet the unprecedented need, robotics teacher Robert Richards prints face shields for medical personnel. He worked with Operation Face Shield Ann Arbor, who handled distribution of the masks to hospitals. "To date, I have delivered 105 face shields," Richards said. "I’m now producing and delivering 45 per day. I have 16 3D printers running about 12 hours per day now."

In addition to the face shields, Richards also printed 21 N95 masks.

To put all this into context, students and teachers work on personal protective equipment for health care workers.

Robotic student and teachers assemble to fill PPE needs of health care workers

1. Prior to his call to action, Ronald Fillmore 11 worked on several robotics projects. He served as CAD/3D printing captain on the FIRST robotics team for 3 years. He had trained numerous other students how to design parts and turn them into end products using the 3D printers," his adviser Bryan Tasior said. 2. Fillmore works from home to make personal protective gear for local hospitals and caregivers.

FIRST adviser Bryan Tasior assembles a 3D printer to build personal protection gear on his dining room table. "I was able to intercept a printer we ordered from FedEx and am assembling it at home," Tasior said. "It is a complicated build but the printer works amazing!"