

## USING SCHOOL WORKSHOPS DURING THE CRISIS: Covid-19 medical equipment

In Gainesville, a Facebook group called “Gainesville Face Mask Crafters for COVID-19 Support,” dedicated to making bespoke face masks, has formed. You can download a pattern, follow posted instructions or watch a YouTube video made by someone in the Netherlands, then use materials from your home or purchase some from stores with outside pick-up sites, or online outlets, to create masks. Some examples that have been posted are beautiful—likely for personal use and reuse, rather than one time use in hospital settings. [https://www.facebook.com/GNVFaceMaskCrafters/?\\_tn=%2Cd%2CP-R&eid=ARCasHFudNMPpZW7Jf-C3FrQ61x0YtR6fTtfVTOm7HYerRvYVmk72Nd7J5XEAIL3\\_5opM0X0vYS5Luf5](https://www.facebook.com/GNVFaceMaskCrafters/?_tn=%2Cd%2CP-R&eid=ARCasHFudNMPpZW7Jf-C3FrQ61x0YtR6fTtfVTOm7HYerRvYVmk72Nd7J5XEAIL3_5opM0X0vYS5Luf5)

So far, it seems people can make a dozen or two, but not hundreds of masks, from their homes. This leads to the question, if single-use masks are not available, what will be the downside in terms of personal and public health? What if we can no longer live in a world where everything is disposable?

A second Gainesville story involves DIY ventilators. It turns out that a professor of anesthesiology at the University of Florida, Samsun Lampotang, has experience inventing ventilators. His work has led to 43 patents held by the University of Florida, beginning with his work as a mechanical engineering student decades ago. He and a team from UF and around the world are designing a low-tech, open-source ventilator that can be built using components available at local hardware stores. In this example, the knowledge required to invent the machine is sophisticated and global, but its production, like the masks, will be relatively low-tech and therefore available to many.

<https://www.gainesville.com/news/20200325/uf-researchers-design-low-cost-diy-ventilator>

Once this public health crisis has abated, how might these cottage industries transition into new forms of work? As I try to envision life after COVID-19, I think of the millions of people who will need new ways to make money and to provide basic necessities for themselves and those they love. Sewing and machine-making are two points of entry into different manufacturing sectors. How might such cottage industries evolve over the next year or two? Currently, Etsy distributes customized goods—how might it be repurposed for new forms of making?

I wonder if the industrial revolution has coming to a crashing halt. Will factories, and other industries based on the factory model of centralized production, repetitive work, economies of scale, and radically cheap, overabundant, products, simply restart? Or, will we be willing to pay more for fewer items, in part to pay people more for their time? Like many, I have been concerned that our culture’s ravenous consumption has lead us to an unsustainable future, in many ways. Despite its obvious, horrific consequences, might the COVID-19 virus, which has already reduced global energy usage and resulting carbon emissions, have another hidden upside? Will this pause allow us to value quality compared to quantity and redesign our world, or is it too late?

<https://www.syracuse.edu/stories/3d-print-response-covid-19/>

<https://www.ventilaid.org/>

<https://mail.google.com/mail/u/1/#inbox/KtbxLrjNbGqvLXkXsvWDDzfBhCmpwqrSNB?compose=CSkGSGKhwDshCGRPCngSGPrjPJLmJWmsqcZqbDvPGSQtcVlqvPQzdwVJKSzglsVZKXZzqrrBdfTMPFpLgcgrWWSzvqLJvCphBZRnvvxDkshvZFcJXkCNwBDPfrDRQTSPHmVVcPwMsbwrcrgRVdsgzqXKSwRbmtBNXfk>

[https://www.cbc.ca/radio/asithappens/as-it-happens-thursday-edition-1.5502954/canadian-doctor-who-works-in-gaza-3d-prints-face-shields-for-covid-19-pandemic-1.5502964?\\_vfz=medium%3Dsharebar](https://www.cbc.ca/radio/asithappens/as-it-happens-thursday-edition-1.5502954/canadian-doctor-who-works-in-gaza-3d-prints-face-shields-for-covid-19-pandemic-1.5502964?_vfz=medium%3Dsharebar)

<https://blog.prusaprinters.org/from-design-to-mass-3d-printing-of-medical-shields-in-three-days/?fbclid=IwAR2uxUDsEkbwPhSh88uDLXlv8SB2bt2QNUB3cWrzN6h3XteFSfovj-gv9TY>

This excellent toolkit was collated by Princeton:

[https://docs.google.com/document/d/1vqvzfn3UhlAnplFhmk2PrrpdJZ\\_22LrCRgl1OTYjjP0/mobilebasic](https://docs.google.com/document/d/1vqvzfn3UhlAnplFhmk2PrrpdJZ_22LrCRgl1OTYjjP0/mobilebasic)