

Portable Power & Education



6 reasons why portable power is the key to creating a safer and healthier classroom model



* The next generation of the 27K mAh Portable Power Unit is surfaced with an antimicrobial film

Summary: The most prominent proposals to create safer classroom environments (from hybrid schedules, to modular social distanced desk formations, to outdoor learning) all rely on being able to access a mobile and high capacity source of power.

The classroom of the future will have to be more fluid and adaptable to meet the ever-changing health recommendations. In this piece, we explore six proposed solutions to creating a safer model for the classroom that can all be realized with the addition of ChargeTech portable power solutions.

ChargeTech's portable power solutions, such as the brand new antimicrobial 27K unit, are necessary resources for creating a safer and healthier classroom model.

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The Future of In-Person Learning

Experts across the education sector are actively considering what changes must be made to the classroom environment to better protect the health and safety of our teachers and students.

To meet this challenge, our clients in education are turning toward our [Portable Power](#) solutions in combination with our [UV Disinfection Products](#) to create more flexible classroom environments for the post-COVID world.

As discussed in our recent article, [UV Disinfection and Education](#), **schools at all levels, from preschool and elementary to the university level, are under intense pressure to resume in-person learning as soon as possible.**

The incentives to return to the classroom are at once social, pedagogical, and financial. In brief, online learning has proven to be challenging for teachers, parents, and students, *and* less effective as a learning method.

Further, families rely on schools to feed, educate, and watch after their children during the workday. Moving schools online disrupts this essential service, leaving families in overburdened and difficult positions.

And finally, in both private and public education, the financial model of schooling relies on in-person interaction. Without in-person learning, public school districts across the country are [facing steep budget cuts](#). And in private education, the tuition model becomes untenable without comprehensive in-person learning experiences.

While there is much uncertainty as to whether schools will resume in-person this fall, several large school districts have already committed to online classes for the foreseeable future.

However, the fact remains clear that **schools will need to bring students back to the classroom eventually, and when they do, the classroom environment will have to be significantly altered to better protect the health and safety of teachers and students.**

One necessary solution to virus-proofing the classroom is enhanced UV disinfection solutions to keep classroom technology safe from viruses and harmful bacteria. ChargeTech's suite of [UV Clean and Charge Carts](#) are trusted by our clients in education to do just that, with the capacity to clean and store up to 40 laptops, Chromebooks, or tablets at once.

However, school districts are considering a host of solutions and innovations to rethink the physical model of the classroom in order to curb the spread of illnesses and diseases.



The classroom of the future will have to be much more creative and adaptable. Portable power allows for schools to pursue these proposed solutions by providing a flexible source of power. The above is a concept for an outdoor school by UK design firm Curl la Tourelle. (DeZeen)

Solutions for a Safer Classroom

All of these solutions rest on making the classroom more fluid, flexible, and adaptable to comply with ever-changing health recommendations. As opposed to being confined to a fixed physical configuration that does not allow for social distancing, the modern classroom must be modular, transformable, and creative.

A common problem with the solutions being explored today is the challenge of accessing an adequate source of power.

The fixed power grid in classrooms binds the configuration and spacing between students in inflexible manners that cannot be changed to accommodate health code recommendations.

That is why leaders and innovators across the education space are turning toward our portable power solutions to allow for a whole host of alternative learning configurations from outdoor classrooms, to impromptu classrooms, to socially-distanced desk configurations.

Portable power has proven to be an essential tool to liberate the classroom from static physical classroom arrangements that encourage, as opposed to curb, the spread of harmful bacteria and viruses.



Schools are considering how to space out desks to allow for social distancing. This task is made easier with the addition of portable power, as the desk unit can access power wherever it is moved to.

1: Social Distancing in the Classroom

The first step to reducing the risk of illnesses in classrooms is to space out desks to comply with the six feet of separation guideline. Many school districts, such as New York City, are opting for a hybrid schedule of part in-person learning and part online

learning this fall to reduce the occupancy in school buildings and to allow individual students more space in between desks.

This socially distanced model often breaks with the existing power grid in a classroom. As desks are spaced out and placed in locations where they were not originally intended to be, power must be diverted to these new locations.

This typically requires extension cords and wires to be laid down to each individual desk. This extension cord solution is not only unsightly and tedious but also a tripping hazard that most schools and offices choose to avoid for good reason.

As an alternative, **our clients in education often choose to provide portable power packs at each desk so students can power their laptops or tablets from their socially distanced workstations without having to wire extension cords across the floor.**

This portable power alternative is more streamlined and safer than extension cords. And further, it allows for greater flexibility to move desks as needed with ease.

2: The Modular Model

One of our clients in the education space, Chris Steffich of Benchmark Properties, who manages learning and event spaces for universities in the Chicago area, has recently turned to our portable power devices to transform the learning environment.

Mr. Steffich has sourced our portable power packs to provide greater flexibility for university students and guests in his centers. "The ability for every guest to access power is a necessity," Mr. Steffich said, "yet the sources of power should not be restricting in how a space can be used and arranged."

The learning and event spaces in Steffich's buildings are modular and changeable. He refers to desks for learning and meeting as *Pods* which can be reconfigured in innumerable ways to meet the user's needs thanks to each pod being powered by a ChargeTech [54K](#) or [40K](#) Portable Power Pack.

"With ChargeTech portable power packs, our clients are empowered to transform their space in a way that fits their needs as opposed to being confined by their access to power," said Steffich, "and now, this is also a COVID solution, where flexibility in learning environments has proven to be essential to keep people safe."

Portable Power Allows for Fluid and Modular Classrooms

This flexible and modular model for learning environments is sure to be the next step in classroom layout and design. Teachers and administrators must be free and able to reconfigure and arrange the classroom in a way that keeps teachers and students safe.

The easiest and most effective way to allow for modular classroom design is with ChargeTech Portable Power solutions which allow the classroom to be as mobile as the student is, providing the freedom to find innovative and safer configurations of desks and workplaces.



Two of our best-selling portable power solutions, including the all-new antimicrobial PPO, available on August 11th.

3: Outdoor Classrooms

The second major development in learning spaces which is occurring in response to the COVID-19 pandemic, is impromptu and outdoor classrooms.

Rice University, in Houston Texas, which is currently planning on resuming in-person learning this fall, is building [nine outdoor structures](#) on campus to hold classes while maintaining social distancing to reap the health and safety benefits that comes with being outdoors.

In order to both reduce the population density in classrooms and mitigate the risk of transmission, the Vice President of the Administration at Rice University, [Kevin Kirby](#), announced the plan to move classes outdoors into several semi-permanent structures.

With open siding on all four sides, and a rigid tent-like structure to block the rain and sun, Rice's plan for outdoor classrooms is an important step toward resuming in-person learning in a safer manner.



Outdoor schooling, such as this art class on a roof in NYC in 1912, was successfully used to curb past infectious diseases. Philipp Kester/ullstein bild via Getty Images.

A Historical Precedent for Moving Outside

There have been calls for outdoor learning at all levels of education. Ginia Bellafante of the *New York Times* cited [successful historical campaigns](#) to move schooling outdoors during outbreaks of Tuberculosis and other infectious diseases in the early 20th century.

In 1907, two doctors in Rhode Island, Mary Packard and Ellen Stone, constructed an open-air classroom during an outbreak of Tuberculosis in the Providence area. Their successful experiment led to a wave of outdoor education in the early decades of the 20th century. These historic experiments proved effective, with in-person learning continuing uninterrupted and zero recorded transmissions of diseases amongst students, according to Bellafante.

Proponents of outdoor education also cite the overwhelming evidence that suggests an improvement in behavior and an increase in learning amongst students in outdoor vs indoor classroom settings. Science and math especially have proven to be much more effectively retained in children who studied these subjects in outdoor settings.

The reasons to move schooling outdoors are numerous. This fall, and in the coming years, we may witness a wave of creative solutions to outdoor education with tents and semi-permanent structures erected on campuses and in parks across the country.

Portable Power in the Outdoor Classroom

The most glaring challenge to outdoor education, however, is the difficulty of accessing power for laptops, computers, projectors, speakers, and so on in these impromptu structures.

Unlike the early 20th century, education today relies on technology of all kinds. If we are going to successfully move classrooms outdoors, there must be a reliable and portable source of power available for teachers and students alike.

ChargeTech portable power packs, such as the [27](#), [40](#), or [50K](#) mAh units, or the more powerful [125K Power Station](#), are critical solutions to this problem.



Concept for classroom-tents erected outside of school buildings by UK design firm, Curl la Tourelle. Outdoor learning has been heralded by advocates in many sectors as an essential solution to resume classes in person. (DeZeen)

Our units can be operated outdoors in covered structures to power computers and technology of all kinds for extended periods of time. With a wide range of sizes available, there is a ChargeTech portable power solution to meet every need of the modern school.

These durable and high-capacity units are an essential resource for schools seeking to explore creative solutions to in-person learning in hopes of better protecting the health and safety of students and teachers.

4: The Impromptu Classroom

Aside from outdoor classrooms, schools are also setting up classes and learning spaces in conference centers, gymnasiums, or other sports arenas. These impromptu locations offer much more floor space to reduce crowding and to spread out with ease.

Again, **the barrier to effectively employing these impromptu locations as classrooms is an adequate source of power.** ChargeTech's portable power solutions

allow for a basketball court or an event space to easily be transformed into places of learning.

Our portable power outlets provide a reliable source of power wherever is needed.



Our UV Clean and Charge Carts can be used to store and sanitize our portable power packs to create a safer and cleaner environment.

5: UV Disinfection + Portable Power

With the transition from traditional power outlets to portable power packs comes the need to charge and store these individual units. That is why **our clients in education often choose to combine portable power packs with our [UV Clean and Charge Carts](#)**.

Several of our clients in education have sourced our UV Clean and Charge Carts, such as the [30 Bay](#) or [40 Bay](#) unit, which are typically used to store laptops or tablets, to house a suite of portable power products.

This innovative solution allows the client to clean, charge, and securely store up to 40 portable power devices in a UV-C equipped secure location.

When portable power products are being supplied to students, like any technology device, they need to be both fully charge and sanitized. Luckily, our [UV Clean and](#)

[Charge Carts](#) together can accomplish these two essential tasks at once while providing a secure centralized location to store your inventory of portable power products.



The new 27K mAh portable power pack from CleanCharge by ChargeTech is the world's first antimicrobial PPO. Available late August, 2020

6: The World's First Antimicrobial Portable Power Pack

The final essential innovation to improve the health and safety of our classrooms is the development of the world's first antimicrobial portable power pack.

The next generation of ChargeTech's best-selling 27K mAh battery pack, available for shipping in late August 2020, will come wrapped in a groundbreaking antimicrobial film.

This antimicrobial technology contains a silver-based additive which slowly releases from the film in the presence of moisture, binding to the oppositely charged microbial matter, effectively killing harmful microbes such as bacteria and viruses on the spot.

This technology, which is expertly made and applied in the USA, is completely human safe and will last for 10 years if the unit is cared for properly.

Schools that are looking to mitigate the risk of infection in their classrooms with portable power technology will be very interested in looking at this groundbreaking solution from ChargeTech.

CleanCharge by ChargeTech: [Learn More](#)

As part of the new CleanCharge by ChargeTech line, the antimicrobial 27K unit signals a commitment and dedication by ChargeTech to find solutions that make our classrooms and offices safer places to be.

If you are interested in learning more about this product or any of our portable power solutions for the modern classroom, don't hesitate to reach out to a ChargeTech representative at the link below.

Get in touch with a ChargeTech team member
today if you have any questions.

Contact: Sales@chargetechsolutions.com

Or we can work with Synnex to provide a quote for you
and your valued client.