

Education and the new normal

Using technology to improve cleanliness and student safety







Contents

വ	Education	and the	$D = V \wedge V \wedge r$	normal

- United States Federal Government Funding: HEROES & CARES Acts
- Safety first
- The value of autonomous floor scrubbers
- O4 Deploying an autonomous floor scrubber at a school
- What's Next for Schools



Education and the new normal

If the professional educator's job was not difficult already, school districts everywhere are now contending with an uncertain learning environment. Perhaps the only certainty for educators right now is that this school year will be unlike any previous school year. Students will learn and teachers will teach — but how that takes place is still up in the air for many school systems. Having weighed the pros and cons, many schools are reopening their doors. In some cases, teachers and staff will be the only ones in the building as they deliver online learning to homebound students. In other cases, schools are completely open for students to participate with in-person learning. And there are even more cases where a hybrid approach of online and in-person learning is taking place. Even though classes have resumed, it's far from school as usual and regardless of how many or how few people are in the building, the school must be as clean as possible. Administrators, teachers, staff and students are developing entirely new models for everything from class scheduling and room setup, to food service, sports and extracurricular activities. These next few semesters will present challenges and opportunities for innovation. One silver lining is the recently passed legislation for COVID-19 relief, aid and security to benefit individuals, businesses and schools.

United States Federal Government Funding: HEROES & CARES Acts

Coronavirus relief legislation

Total Stimulus Package

\$5.2 trillion



School Reopening Aid



Small Business Loans



Stimulus Checks for Tax Filers + Dependants



Employee Tax Credits



Enhanced Unemployment Benefits



Eviction Protections As part of this \$5+ trillion aid package, lawmakers earmarked \$100 billion dollars to help educational institutions open their doors again. Nearly 60 percent of that package is designated for K-12 schools, and the remainder is allocated to higher education. The U.S. Department of Education has established the Elementary and Secondary School Emergency Relief (ESSER) Fund in order to grant monies to state educational agencies (SEA's) for distribution to local educational agencies (LEA's), including individual schools and school districts. Clearly, the Department of Education has identified technology as a key driver behind helping schools return to some degree of normalcy, asking state educational agencies to reserve some funding to support remote learning and academic innovations.

ESSER Fund

To certify for ESSER funding, state educational agencies must submit to the U.S. Department of Education:

- · Certification and Agreement cover sheet
- Programmatic, fiscal and reporting assurances
- · Information of use of ESSER funds



Safety first

Among the many "new normal" models that school administrators must address (and arguably the most critical), are custodial and cleaning protocols. From pre-school to grad school, any facility serving students is documenting and closely monitoring its methods and effectiveness for cleaning. Because schools are complex multi-functional settings, custodial managers must account for the disinfection of classrooms, common areas, washrooms, science labs and offices. Within each of those areas, custodial staff must clean tables, chairs, counters and high-contact touch points (such as light switches, doorknobs, handrails, lockers, elevator buttons and garbage/recycle containers). Some facilities are mandating that the cleaning staff identify disinfected areas by placing signs or stickers on-site. This degree of attention, while necessary, can strain the resources of even the most efficient cleaning crews.

Custodial management must account for:



Disinfection

Deeper, more time-consuming cleaning of classrooms, common areas, washrooms, science labs and offices.



Scheduling & tracking

It takes planning to cover the entire school safely, effectively and properly. It requires documentation to confirm that it was done thoroughly.



Campus presentation

Educational institutions must be clean and inviting for students, teachers, staff and visitors.



Safety in high traffic areas

Custodial teams must work around class schedules and students. It's a balance between keeping areas clean while avoiding the creation of a hazardous environment.



Labor challenges

In light of current events, custodial work has become more hazardous. In some extreme cases, custodial workers are demanding higher wages.



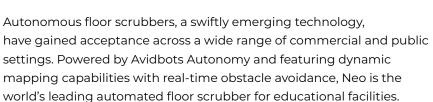
Complex facility layouts

Campuses feature hard-to-reach areas, tight corners, narrow hallways and large common areas.





The value of autonomous floor scrubbers





Avidbots Neo for educational institutions

Heavy-duty cleaning for high traffic areas

Consistent, around-the-clock cleaning keeps schools looking their very best no matter how large of a student body. Neo is ruggedly built with separate clean and waste high-capacity water tanks, swappable long-life batteries, and adjustable speed and water flow for heavy-duty cleaning.

> Safe, secure operation

Powered by Avidbots Autonomy, Neo flawlessly navigates dynamic environments, avoiding anyone and everything in its path. With Neo cleaning the school floors, administration can assign custodial efforts to priority student and staff areas that require regular and consistent disinfection — classrooms, faculty lounges, study areas and lunch rooms — while ensuring the health and safety of students, teachers and staff.

Simple, versatile cleaning configurations

The user-friendly touch screen interface and manual steering option make Neo easy to use. Custodial operators can easily switch into manual mode with a simple command. Once the manual cleaning is completed, Neo can be easily switched back into automated floor scrubbing mode.

Remote fleet management and performance metrics

Custodial managers can check in on Neo at any time and get a host of useful information using the proprietary Avidbots Command Center.

The web-based software lets you monitor, manage and track your Neo — or an entire fleet of Neos — remotely and in real time. You'll be able to access highly detailed reports of every cleaning operation, including precise productivity metrics and sector-level coverage maps.

School districts around the world have been deploying Neo to help address the increased need for regular and consistent cleaning and sanitizing. With Neo autonomously maintaining the floors, the custodial team is able to focus on high-touch surfaces. One school district that has recently deployed Neo is the Southern Regional School District in New Jersey, USA.

"The most important thing for us to think about is the health, safety and well-being of our students, teachers and staff as they return to schools this fall," said Southern Region School District Superintendent Craig Henry. "A solution like Neo that cleans more effectively, efficiently and gives my custodial team more time to focus on areas that students are touching frequently, is going to make a world of difference as we enter this new world of education."





Deploying an autonomous floor scrubber at a school

There is a learning curve associated with the adoption of any new technology. At Avidbots, we realize this learning curve exists, which is why we have Avidbots Customer Success. When a school invests in a Neo, Avidbots Customer Success engages, overseeing all aspects of deployment.

Deploying an autonomous floor scrubber involves the following steps:



Setup

Once delivered but prior to training, our team ensures that Neo is ready for action. This means Neo is uncrated, batteries and accessories are installed and an active internet connection is made.

Train

One of the most important steps includes our "train the trainer" approach with the school's Managers and Supervisors. By training the trainer, we ensure the knowledge is retained within the organization, regardless of custodial staff turnover. The training session is quick and non-disruptive, taking place over two days with only a few hours required each day, letting the custodial team get back to their work as quickly as possible.

Complete

After training and testing, the Deployment is almost complete. As an added support, our Customer Success team will continue to work with the on-site custodial team by hosting 30/60/90-day check-ins. This ensures Neo becomes a welcome and efficient part of the custodial team.

Prepare

We connect with the facility management team at the school to understand the expectations and goals for Neo. Additionally, we gather details about the school and meet the custodial team which will assist in a smooth deployment.

Generating a cleaning plan and a cleaning map

Our technician will map some areas of the school—this is to fill in any missing data from the CAD files and/or blueprints. The mapping stage is also the time our Technician trains on-site Managers not only how to map, but how Neo uses the map to navigate.

Test

Once the Cleaning Plans are downloaded into Neo's on-board computer, Neo is ready to clean autonomously. CAD files and blueprints often differ from actual layouts, so we gather additional laser data and make adjustments to the cleaning plans. Similarly, after mapping a school, we want to make sure that Neo is going to clean efficiently, effectively and most importantly, safely!

Additionally, because Neo is internet-connected, our Customer Success Team monitors Neo, working with the school to continuously improve efficiency based on changing environments, construction, temporary obstructions, etc.





What's next for schools?

In the coming months, the Department of Education will be awarding ESSER Funds to ensure primary and secondary school students can continue their studies. School systems will be tasked with leveraging new and emerging teaching methods and technologies. With strong programmatic, fiscal and reporting assurances tied directly to the funds, there's no question that exciting new learning environments will emerge.

The custodial professionals responsible for maintaining educational facilities will be tasked with providing safe, clean areas where students, teachers and staff can work and learn at ease. The Avidbots Neo autonomous floor scrubbing robot can augment the work of the custodial teams, taking on cumbersome floor cleaning efforts while cleaning professionals focus on high-touch, high-traffic areas.

Challenges for school administrators and facility managers



Maintaining high standards for cleanliness, especially in the wake of global health events.



Providing an inviting learning environment for students.



Heavy traffic areas requiring frequent cleaning, often multiple times per day.



Keeping floors consistently sanitized and dry to minimize slip hazards for students, teachers, staff and visitors.



Keeping operational costs low despite rising labor costs, overhead and custodial staff turnover.



Ensuring all areas are cleaned regularly and that cleaning is tracked, documented and reported on.



Why Avidbots?

Buying an Avidbots Neo isn't just buying a floor scrubber. It's investing in a technological future that can redefine your cleaning function, making it more productive, more cost effective and easier to run. More importantly, our robotics and AI technology open up new opportunities to make your business even more successful. We realize this isn't just about buying a product, or a technology, or even a business proposition. You want to buy into a trusted partner who can take you into the future of automated operations using cutting edge robotics. At Avidbots, we work side-by-side with our customers to earn that trust and realize all the benefits that robotics can bring them.



About us

Avidbots is a robotics company with a vision to make robots ubiquitous to unlock humanity's potential with a hyperfocus on autonomous cleaning. Our groundbreaking product, the Neo fully autonomous floor scrubbing robot, is deployed around the world and trusted by leading facilities and building service companies. Headquartered in Kitchener, ON, Canada, Avidbots is offering comprehensive service and support to customers on 5 continents.

Contact us

Learn more about Neo.



sales@avidbots.com



+1.855.928.4326



avidbots.com





Avidbots Corp 45 Washburn Drive Kitchener, ON N2R ISI Canada Avidbots Chicago 5400 Newport Drive STE 7 Rolling Meadows, IL 60008 United States of America



