# SOUTHERN VIRGINIA HIGHER EDUCATION CENTER

# ANNUAL REPORT

2020



# CONTENTS

6
7

# MESSAGE FROM THE EXECUTIVE DIRECTOR

The SVHEC has been paving the way to accessible, affordable educational opportunities in southern Virginia for more than 30 years. Regardless of where individuals are in their educational journeys, there's an on-ramp at the SVHEC. The FY2020 Annual Report highlights the comprehensive opportunities that have connected individuals to life-changing educational destinations and way points over the past year. Even the disruption of a pandemic could not keep us from moving forward!

By highlighting personal success stories from some of this year's clients and students you'll learn how the SVHEC and its partners and affiliates are helping people map life-changing educational pathways. We'll introduce you to Jared Dawson, Eli Evans, Tina Jang and others who have leveraged SVHEC opportunities to get their professional and personal goals on track. You'll also learn how we've helped build and grow the southern Virginia economy by developing strong and competitive talent pipelines. This means keeping (and bringing) people and jobs into the region we love.

FY2020 has been an extraordinary year. We've expanded the Career Tech Academy to include an energy track and work-based learning opportunities as well as becoming approved as a Virginia Department of Labor & Industry Youth Apprenticeship Sponsor. In addition, we launched the first cohort of the HVAC@SVHEC program and completed work on the much-anticipated IT Academy expansion. Our remarkable Volunteer Literacy Program continued moving individuals from literacy to confidence with training, higher education, jobs, and quality of life. While settling into its new location, the R&D Center engaged with past and prospective clients on a rebranding strategy that conveys its unique capacity to support and grow industry and entrepreneurs.



The final quarter of FY2020 was like no other period in SVHEC history. While the coronavirus closed our buildings on March 22 it did not stop our work. Staff transitioned seamlessly to teleworking and virtual operations. Workforce Training and Career Tech Academy instructors stayed connected to students, using the time to reinforce technical concepts and employability skills. In June, CTA Mechatronics students used social distancing to sit for their Siemens certification examinations. During the closure, construction teams completed a host of renovation projects that have upgraded our buildings and expanded program capacity, including completion of the IT Academy expansion and new Automation & Robotics Lab.

I think you'll be inspired by the personal stories and reflections in this report. This is what drives our commitment to providing educational opportunities – even in the face of a pandemic.

**Dr. Betty H. Adams** SVHEC Executive Director

# **ABOUT THE SVHEC**

For more than 30 years, the SVHEC has been helping people in Southern Virginia transform their lives by harnessing the power of education — on their own terms. We began operations in 1986 out of a modest 500 square-foot mobile unit on the grounds of the local high school. Since that time, we've become a state agency and now operate out of two repurposed tobacco warehouses donated by local benefactors and renovated with community bonds, private donations, historic tax credits and various state and federal grants. To accommodate the growth of our job training programs, in 2019 we expanded into the nearby commercial space of a renovated textile factory.

Today, the SVHEC is an epicenter of education and job training in Southern Virginia. Our campus features 115,000 square feet of technically sophisticated space including high-tech classrooms and labs featuring simulation technology focused on Science, Technology, Engineering, Math, and Healthcare (STEM-H).

Through a unique partnership with community colleges and state universities, we are able to

provide convenient, affordable access to college degree programs and job training opportunities right here in South Boston. We also provide short-term, hands-on credential-based training in mechatronics, information technology, welding, and HVAC to help you go from "zero to career" in less than a year. We are also home to the Commonwealth's only single-source location for product design and development services.

The SVHEC also seeks to help both new and existing businesses and industries remain productive and profitable. Therefore, we offer employers the opportunity to partner on customized, innovative training solutions that support their evolving workforce needs.

To make these opportunities as accessible as possible, financial aid and financial assistance for programs and training opportunities are available. We also offer day and evening classes for scheduling flexibility.

Your opportunity lives here — today and in the future. Through the SVHEC, you can advance your career and education, regardless of your age or stage of life.

#### Your Opportunity Lives Here

# GOVERNANCE

## FY 2020 BOARD OF TRUSTEES (JULY 1, 2019 - JUNE 30, 2020)

Mr. Peter Blake

Mr. Gerald "Jay" Burnett Ms. Mattie Cowan

The Honorable James Edmunds

Dr. Quentin Johnson

Mr. Doug Lee

Mr. John Lee

Mr. Paul Nichols

Dr. Jacqueline Gill Powell

Mr. Tom Raab (Designee of Dr. Glenn DuBois, VCCS Chancellor)

Mr. Dennis Witt

Dr. Charlette Woolridge

The Honorable Dennis Witt

The Honorable Tommy Wright

## **EXECUTIVE LEADERSHIP**

Dr. Betty H. Adams, Executive Director Dr. Nettie Simon-Owens, Chief Workforce Development Officer Mrs. Brenda Terry, Chief Finance and Operations Officer



**OLD DOMINION UNIVERSITY** 

# **K12 OPPORTUNITIES**



## **K12 OPPORTUNITIES**

## Offering work-based learning to K-12 students

#### Level Up: SVHEC Expands Career Tech Academy with Level 2, Work-Based Learning

In 2018, SVHEC launched the Career Tech Academy a hands-on training program for high school juniors and seniors from Charlotte, Halifax, and Mecklenburg counties. Students enrolled in CTA pursue in-demand career training in information technology or mechatronics. Year one outcomes for the program were exceptional with

Being able to be a part of CTA-Level 2 has allowed me to gain experience in the workforce and in the field of computer science. The class assisted me in gaining insights into my future goals of computer engineering and has given me the opportunity to gain valuable hands-on experience that I may not have had if I were not a member of CTA.

- 77 industry recognized certifications earned
- 25 community college Career Studies certificates awarded
- 1 winner of the statewide Women in STEM Essay contest

SVHEC expanded the Career Tech Academy in FY 2020 by building on the success of year one. In 2020, a second level encompassing Work Based Learning was added.

Open to high school seniors who successfully complete CTA Level 1, the level 2 program provides students with an opportunity to apply their skills with a paid work experience. Three days a week, students travel to job sites where they function as company employees while supervised by a mentor.

The other two days, they are in class with the CTA Level 2 instructor who focuses on employability skills. This CTA Level 2 class helps students apply their training to the real world and guides them as they navigate school

and work.

We made a strategic decision to go through the process of registering as an apprenticeship sponsor so that we can be part of the solution and also serve as a resource for businesses interested in becoming apprenticeship sponsors.

 David Kenealy, SVHEC Special Assistant for Innovation & Development Approved Youth Apprenticeship Sponsor

**SVHEC Becomes** 

SVHEC believes apprenticeships can play an important role in workforce

development. In FY 2020, SVHEC put words into action by becoming a registered youth apprenticeship sponsor through Virginia's Department of Labor and Industry (DOLI).

As defined by the Virginia DOLI's website, registered youth apprenticeships, "integrate school-based and work-based learning to help students gain employability and occupational skills." To meet the standard of a Virginia DOLI approved youth apprenticeship, workbased learning experiences must be paid, meet curriculum guidelines, and be endorsed by business and industry.

"We made a strategic decision to go through the process of registering as an apprenticeship sponsor so that we can be part of the solution and also serve as a resource for businesses interested in becoming apprenticeship sponsors," said David Kenealy. Kenealy heads the SVHEC's R&D Center for Advanced Manufacturing & Energy Efficiency, and oversees the Career Tech Academy (CTA).

"As a company looks to bring on new talent, hiring someone who's gone through apprenticeship offers several advantages. The apprentice has been paid, has completed the work, has had a mentor, and can be a valuable resource for a company," said Kenealy.

SVHEC hired its first youth apprentice, Career Tech Academy Level 2 student Jared Dawson after gaining approval as a registered youth apprenticeship sponsor. "I programmed the machines and did a lot of the hands-on work," Dawson said.

Jared Dawson, CTA Level 2 Graduate and First SVHEC Youth Apprentice





Left: CTA students at Get Into Energy Innovation Challenge Kickoff; Middle: Solar panel installation; **Right:** Solar panel complete

> Dawson worked at the R&D Center three afternoons a week and attended class with his fellow CTA Level 2 classmates two days a week. Registering as a youth apprentice provided Dawson with an opportunity to work side-by-side with the R&D Center's technicians and assist with client-based projects that included parts for the Blind Stapler Tool, a seat for TMI Autotech, and trophies for Virginia International Raceway.

> "CTA changed my life. I was a little skeptical at first, and I wasn't sure I would be good enough to make it anywhere, but they pushed me and pushed me for two years," Dawson said. "They showed me everything I needed to know and what to do if something went wrong. It wasn't all a breeze — I got stumped a lot of times — but they never gave up on me. I graduated high school, and in two weeks I had a full-time job making really good money. My life wouldn't be a success if CTA was never a thing. Thank you all at SVHEC and Halifax County High School for giving me this once in a lifetime opportunity."

#### **CTA Gets into Energy**

Career Tech Academy leaders spend a lot of time thinking about energy. With workforce statistics showing nearly one-third of Virginia's current energy workforce eligible for retirement within the next six years, CTA leaders believe the energy career cluster will soon top the list of "hot jobs" in the Commonwealth.

"We have been working closely with several energy business partners as we recognize the upcoming employment gap within the energy field," said CTA Administrator Stephanie Robinson.

During the 2019-2020 academic year, Robinson worked with CTA instructors to use guest speakers and hands-on activities to purposefully introduce students to energy careers. CTA's focus on energy led to the program receiving the Solar for Students Award sponsored by Dominion Energy and the National Energy Education Development Project (NEED).

"As our mechatronics program makes a shift to

### Solar for Students Award Recipients Receive:

- 1.2 kilowatt photovoltaic system that converts sunlight into electric power, often referred to as "solar on a stick"
- An online monitoring tool to provide real-time data on the system's activity and the amount of electricity generated
- Solar Energy training for identified staff
- Solar curriculum, based on state standards, and hands-on kits that will teach students how solar works and how energy, the environment and economics are all part of energy decision making
- Connections to other Solar for Students program participants to share data, partner on projects and expand learning

introduce mechanical and electrical concepts that focus on the energy sector, the Solar for Students Award will allow us to promote educational awareness to our CTA students as well as our community and K-12 partners," Robinson stated.

To further energize the CTA's efforts, the program was awarded a \$5,000 grant from Dominion Energy's Environmental Education and Stewardship Program. Grant funds were used to:

- Incorporate energy career awareness through field trips and guest speakers
- Educate and prepare CTA Level 2 students for the Energy Industry Fundamentals (EIF) credential.
- Assist CTA students with their entry into the 2020 'Get Into Energy' Innovation Challenge

#### Outreach

We believe it's never too early to introduce students to STEM-H careers and engage them in activities that show the wide range of career pathways available in southern Virginia. One of our key performance measures as a Virginia state agency is our efforts to "engage PreK-12 students in science, technology, engineering, math, and healthcare (STEM-H) enrichment opportunities."

SVHEC hosts groups of K-12 students for hands-on tours, and CTA staff regularly visit partner high schools to promote IT, Mechatronics & Energy, and Automation

AmeriCorps STEM Camp introduces students to robotics.

A

-

-

-

D



& Robotics training and career pathways. In addition, SVHEC maintains its sponsorship of, and active participation in, the SoVA Career ChoICE Youth Expo. This annual event exposes more than 4,000 seventh and ninth grade students from four counties and two cities to career pathways in southern Virginia.

# Career ChoICE East

The annual SoVA Career Choice Expo gives over 4,000 K-12 students in southern Virginia the opportunity to Imagine their potential, Connect with employers, and Explore career possibilities. In FY 2020, SVHEC partnered with the SoVA Career ChoICE Planning Team led by Dr. Julie Brown, director of Advanced Learning at the Institute for Advanced Learning & Research, to expand the event to the east.

SoVA Career ChoICE-East will be held in Prince Edward County to provide students in school divisions east and north of Halifax County with an opportunity to have the Career ChoICE experience. Currently these school divisions cannot participate because the distance from their schools to Chatham is too great. Working with regional school divisions, Career and Technical Education (CTE) coordinators, employers, and the SoVA Career ChoICE Planning Team, SVHEC will connect an additional 2,900 K-12 students in nine school divisions to career awareness and exploration.

Originally scheduled for fall 2020, SoVA Career ChoICE-East has been rescheduled due to COVID-19.









### STUDENT HIGHLIGHT

## **ELI EVANS:** THE CAREER TECH ACADEMY ROAD TO SUCCESS

Halifax County High School (HCHS) and Career Tech Academy (CTA) Level 2 graduate Eli Evans is a gadget-designing technology enthusiast. In FY2020, he used his passion and skills to design and build a security camera to be deployed at HCHS and Sinai Elementary School (Halifax County).

Through the CTA's Level 2-Work-Based Learning Program, Evans completed a paid internship with Propel GPS, a cloud-based IoT company based in South Boston. According to its website, Propel GPS's mission is "to save transportation companies and schools money, provide asset security, promote efficiency and safety."

"Eli's current duties at Propel GPS include working collaboratively with multiple stakeholders to improve safety within our school district," said Stephanie Robinson, CTA administrator.

To that end, Evans was asked by Rick Burtner, company CEO, to find a security camera that could be used in the schools for under \$99. "I was looking online, and the MSRP (manufacturer's suggested retail price) for cameras with wireless capabilities ran about \$429," Evans said. Being ever resourceful, Evans decided he would try to make one.

He designed the prototype using a Computer Aided Design (CAD) program and the SVHEC's 3D printer. A small team of people from Propel GPS helped Evans build the camera.

The camera is designed to mount onto doors, and it can be adapted to meet the needs of the user. "It is a Raspberry Pi-based camera with an open source Linux operating system," Evans said. "It has the capability of night vision, which I added after a security consultant asked if it had that feature. It also has a door-opening sensor trigger," he said.

Evans plans on filing for a patent for the device. He credits the CTA's work-based learning program for affording him such opportunities. "The CTA has made all of this possible, leading me to where I am now," he said. As a junior in high school, he was part of CTA's first class when the program launched fall 2018. He enrolled in CTA's IT track and earned five industry recognized certifications including CompTIA A+ and Server+.



#### Tina Jang's story

### **IT Academy and ESL Programs Pave Road to Success**

Tina Jang heard about the Southern Virginia Higher Education Center while still living in Taiwan. Her husband's friend told the couple about attending the SVHEC's IT Academy and his success in finding a tech job after completing the program. The couple had plans to move to the United States, and Tina thought the IT Academy sounded like a great opportunity.

"I've always been interested in technology, and I worked in digital marketing for some years. My husband and I thought I would have a better shot at a tech career if I enrolled in some IT courses before looking for a tech job. We wanted a school that was I started learning English in Taiwan, but all of the English education there is based on standard English that has more usage in cosmopolitan areas such as New York, London, Hong Kong, and Singapore.

— Tina Jang

for awhile without hearing back. I was not confident about communicating in English, and I was afraid my English wasn't good enough to interest companies. My mother-in-law read in the newspaper that there was a free ESL program at the SVHEC, and I decided to try it out."

> As an English as a Second Language (ESL) student, Tina began working with Volunteer Literacy/ESL coordinator Judy Ward to improve her English-speaking skills with an emphasis on understanding southern dialect.

close to us since I didn't know how to drive, and the IT Academy provided us with the perfect solution."

Tina earned a Microsoft Datacenter Academy Scholarship and excelled in the IT Academy, but when it was time to look for a job, she felt her English-speaking skills were holding her back. "After the IT academy, I was desperate to get a job. I had been applying for jobs "I started learning English in Taiwan, but all of the English education there is based on standard English that has more usage in cosmopolitan areas such as New York, London, Hong Kong, and Singapore. When I first moved here, I had some difficulties even though I was familiar with English. I was afraid even talking to my neighbors. I couldn't understand the accent, and I felt I understood less than I expected."



"Talking to Mrs. Judy is a breeze. She is very easy to talk to and has a lot of patience working with me. She encouraged me to speak, to describe things in detail, to use idioms or common phrases."

The Volunteer Literacy/ESL program helped Tina build her confidence and find her voice. "The biggest thing I took from the ESL classes was not being afraid to talk. I became more confident to initiate a conversation, and I'm not nervous even if I don't know what to say. I started to realize as long as I can be honest and speak clearly, I am okay."

No longer held back by her English-speaking skills, Tina successfully interviewed for an externship at the Microsoft Datacenter in Boydton. Because of her IT Academy training, she excelled in the externship and was offered a full-time position as a Microsoft Datacenter Technician.

Today, Tina has the job she always wanted because of the opportunities she found at the Southern Virginia Higher Education Center.

# TECHNICAL TRAINING OPPORTUNITIES

## **TECHNICAL TRAINING OPPORTUNITIES**

## Offering in-demand skills and industry-recognized certifications

#### **Heating Up Careers in HVAC**

HVAC@SVHEC launched its first cohort in May 2019. Led by certified industry veterans Chris Walton (lead instructor) and Michelle Newcomb (lab tech), the program has prepared seven individuals for a career in one of the region's hottest fields.

I chose this program because I wanted to do something different. HVAC is a skill you can take anywhere, and this program has given me more opportunities to get a better job.

- Adrian Elliott, HVAC@SVHEC Completer

"This first year has been successful," Walton stated. "It's been a learning process for all of us, challenging and very informational."

Heating, Ventilation, and Air Conditioning employs more than 500 individuals regionally, but there is growing demand for skilled, certified technicians to enter the field. HVAC@SVHEC uses industry standard tools and



equipment (electric and oil-based) and real-world labs to give trainees the skills they need for success.

"Most of the students came into the program without prior experience. Even the ones who did have experience knew what to do but didn't understand why they were doing it. This has helped teach them how to think about the jobs they're performing," Walton said.



HVAC@SVHEC program participants with instructor Chris Walton, lab tech Michelle Newcomb and program coordinator Jermaine Gooden.



in a training session.

#### **SVHEC Delivers 120 Hour Customized Training**

When Eddie Blount, senior estimator/project manager for Boxley, saw an advertisement for an 8-hour Explore Welding class being offered at the Southern Virginia Higher Education Center (SVHEC) his interest was piqued. Boxley is a construction materials company based in Southwest Virginia, and Blount knew several of his employees could benefit from the training. After speaking with SVHEC Workforce Development staff, Blount enrolled six employees in the welding course.

The most valuable aspect for me would have to be learning the way electrical and hydraulics work, and learning the way to troubleshoot in order to find problems.

 Latosha Mabins, Boxley employee, customized training completer

"After the employees completed the welding training we thought we'd see what other training they [SVHEC] offered," said Blount. "Our equipment has gotten so advanced technologically we were looking for some training. We had tried a couple other avenues that didn't work out."

Boxley employees received extensive training at SVHEC.

See.

SWIT DISTRICT



то внотест

CUER



After successfully completing the training, the nine trainees have a better understanding of how their equipment operates and the principles behind behind it. They're able to troubleshoot and make repairs out in the field, which shortens down time and helps keep projects on schedule.

"The most valuable aspect for me would have to be learning the way electrical and hydraulics work, and learning the way to troubleshoot in order to find problems. I really

The SVHEC team developed a 120 hour customized training solution for Boxley covering electrical, mechanical and fluid power, with 40 hours of training in each module. Ricky Gordon, SVHEC Mechatronics Program Lead, taught the course at the SVHEC and onsite at Boxley.

"We're trying to set up a systematic troubleshooting process which is why I like to visit the company and see for myself what they have. I then take that information and apply it to the training," said Gordon. enjoyed the hands-on simulators, it was good to be able to actually put your hands on modules to figure the problems out," explained Boxley employee Latosha Mabins.

#### **IT Academy Expansion**

Thanks to a grant from the Virginia Tobacco Region Revitalization Commission (TRRC) and a donation from Microsoft Corporation, SVHEC completed a significant





expansion of the IT Academy. Microsoft's \$200,000 donation provided for the renovation of 2,162 square feet of unfinished space adjacent to the IT Academy's classroom and lab. With the expanded footprint, SVHEC added an additional ITA classroom, repair center, and office space for instructors.

TRRC's \$500,000 grant provided funding for SVHEC to hire two full-time IT Academy instructors. The increased physical space and additional staff allowed for the expansion of IT Academy's credential-based course offerings. Four new courses have been approved and are being integrated into the IT Academy's schedule:

- CompTIA Linux+ (started spring 2020)
- CompTIA IT Fundamentals+ (started fall 2020)
- CompTIA PenTest+ (TBA)
- CompTIA Cloud+ (TBA)

Regional employers have identified the new courses as being important for supporting their current and future IT workforce.





Microsoft scholars Tiffany West, Jennifer Epps, Andrew Barksdale, Anthony Putorek (Microsoft Senior Lead Workforce Development Program Manager), Tina Jang, Angelica Alves, and Terrell Brickhouse.

#### **Microsoft's Support of the IT Academy**

Since the IT Academy's inception, Microsoft Corp has been a committed community partner. Microsoft Datacenter employees stay engaged in a number of ways including:

- Speaking to ITA classes to provide a "behind the scenes" look at working in the datacenter,
- Participating in ITA mini job fairs, and
- Serving as a resource for ITA staff so instruction matches what students see in the real world.

Microsoft supports datacenter employees' engagement with the ITA by not only allowing employees to volunteer their time and expertise to ITA but also by generously donating \$25 for every hour The Microsoft Datacenter Academy was started in partnership with SVHEC and Southside Virginia Community College. The program has been so successful that we are replicating it with other education partners around the globe. It has been exciting to see this locally-developed program have global impact.

 Anthony Putorek, Microsoft Senior Lead Workforce Development Program Manager

datacenter employees volunteer within ITA. During their ITA volunteerism, datacenter employees have met with Server+ students to provide industry insight and rewired ITA's datacenter so it replicates the architectural design found at Microsoft's Boydton facility.

To further enhance students' hands-on learning experience, Microsoft donated decommissioned equipment previously used in a functioning datacenter. This gift provided students with a unique opportunity to learn on industry-standard equipment. In 2019, Microsoft established the Microsoft Datacenter Academy Scholars Program with a donation of \$45,000 to the Southern Virginia Higher Education Foundation. The program provides individuals from underrepresented populations with scholarships to fully fund their IT training — including foundational and advanced coursework. The program also provides opportunities for job shadowing and internships.

> Microsoft continued its commitment to the SVHEC with a \$200,000 donation to help expand the IT Academy's expansion.

"Microsoft's interest in building southern Virginia's pipeline of skilled IT workers, who are in demand across all industries, exemplifies what it means to be a community partner," said Dr. Betty H.

Adams, SVHEC Executive Director.

"The Microsoft Datacenter Academy was started in partnership with SVHEC and Southside Virginia Community College. The program has been so successful that we are replicating it with other education partners around the globe. It has been exciting to see this locallydeveloped program have global impact," said Anthony Putorek, Microsoft Senior Lead Workforce Development Program Manager upon establishing the Microsoft Datacenter Academy Scholarship.

### STUDENT HIGHLIGHT

## THE TECHNICAL TRAINING ROAD TO SUCCESS: HARRISON PARKER'S STORY

A radio ad sparked an interest in welding, and now Harrison Parker makes sparks fly all across the country as a certified welder enjoying an in-demand career with great wages. a grinder, torch and plasma cutter, and I got great first-hand experience and instruction in stick and MIG and TIG welding on both plate and pipe. To me it was very satisfying to learn a skill not many can do, and to get better day by day made it all worth the while."

"I always had an interest in learning how to weld and wanted to learn a skill with my hands. I heard an ad on the radio for the Southern Virginia Higher Education Center's welding program and thought why not? When I first got into the program, I literally knew nothing about welding or really anything that it involved. All I knew is that I was interested in learning more and was willing to put the time and effort into it."

When I started the course, I was

kind of nervous not knowing a thing about welding, but [Welding@SVHEC instructors] Marque Medley and Kenny Conner were so easy to work with and to learn from. I really had no problem asking questions and for advice on how to do things. During class I learned how to operate

Once I finished up at SVHEC, I applied for an apprenticeship through the Boilermakers Union out of Richmond. The welding certifications I earned in school really helped me get to the front of the line in the apprenticeship. I didn't have to wait very long before I was indentured and started even more training.

Since completing his Welding@ SVHEC training, Parker has continued to advance in his welding career. Today, he enjoys a wellpaying position that allows him to travel and work on a variety of projects.

"I've been through two welding 'boot camps' now for 6+ weeks each time and have passed weld tests for SMAW, GMAW, and GTAW for contractors at different jobs. Being in a union, I get

really great wages and benefits, plus I get to travel a lot. I just finished up a job in Texas working for APCom.

I would certainly encourage others to give this program a shot, whether they have experience welding or none



Harrison Parker (above); Harrison's welding class (top right), including instructors Kenny Connor and Marque Medley



whatsoever like I did. The program is not only an awesome opportunity to learn, but the facility and welding machines/equipment were top notch. Another important thing is that it is affordable. I took the course at night and was able to work every day before I went in. If anyone has doubts because they think it's too expensive, definitely ask about scholarships and grants. It was a defining factor for me. Without the options that were available to me I don't think I would have been able to do it."

Welding@SVHEC is a hands-on, 10-month training program providing trainees with instruction in MIG, TIG, stick, and pipe welding. Individuals who successfully complete the program have an opportunity to earn nationally recognized welding certification through the National Center for Construction Education and Research (NCCER). Parker completed his welding training in spring 2019, earning NCCER CORE and NCCER Welding levels 1, 2 and 3 credentials.

# **R&D** OPPORTUNITIES



## **R&D OPPORTUNITIES**

# Offering Product Design & Development resources to industry, small businesses and entrepreneurs

#### **Custom Trophies for the Halifax County Chamber of Commerce**

Each year the Halifax County Chamber of Commerce presents awards for Business of the Year, Business Person of the Year, and Young Professional of the Year at its annual meeting. Since its inception, these awards have been purchased from a vendor and engraved with the recipient's name. While the trophy was beautiful, Chamber president Mitzi McCormick wanted something that would feel more personalized and representative of the Chamber of Commerce.

Recognizing the R&D Center's immense resources and talented staff, McCormick reached out to the R&D team to bring her idea to life. R&D Center staff met with McCormick, listened to her vision and translated that into a custom wooden trophy incorporating the Chamber's logo. The new custom trophy not only honors the recipients but also lends itself to Halifax County's rich history and incredible assets.

"I've been impressed with the R&D Center's design and work on other event trophies and awards. We felt it



was important to have something personalized to our Chamber and the community. The R&D staff took our concept and made a unique award that was special to our recipients." — Mitzi McCormick, President, Halifax County Chamber of Commerce





#### R&D Project Update: City of Radford New River Train Observatory

In 2018, Associate Professor Kay Edge, Virginia Tech College of Architecture & Design, and her students worked with SVHEC's R&D Center to bring their design for the New River Train Observatory to life.

A major design element was the use of Cross Laminated Timbers or CLTs, a sustainable building material that has been used for many years in Europe and Canada, although not as much in the United States. "High-value wood products have been identified as an economic development opportunity for Southern Virginia, and CLTs fit within that conversation and sector perfectly," said David Kenealy, special assistant for research and development. "There's been a meaningful push to bring CLTs to the commonwealth."

R&D Center staff were tasked with producing and pressing CLTs using southern yellow poplar, a hardwood species abundant in the Southeastern United States. Historically, hardwoods have been used very little in CLT production, but the R&D Center's staff helped attract



One of the best things about working with David Kenealy and SVHEC was their willingness to include my students in the work of actually producing the panels and to make it a learning experience for them.

 Professor Kay Edge, Virginia Tech College of Architecture & Design market awareness to CLTs as an excellent material suitable for a wide range of building applications. Their work on this project highlights its economic potential.

Professor Edge and her students visited the R&D Center during CLT production for a first-hand look at how design and production come together. "One of the best things about working with David Kenealy and SVHEC was their willingness to include my students in the work of actually producing the panels and to make it a learning experience for them," she said. "I'm sure it slowed them down, but they were generous enough to do it."



#### **R&D** Center Rebrand

The R&D Center for Advanced Manufacturing & Energy Efficiency (R&D CAMEE) was established in 2010 to provide small and medium sized businesses with three core services: technology adoption, applied research, and short-production runs.

As the R&D Center looked toward entering its 10th year of operation, and on the eve of a new decade, SVHEC and R&D leadership engaged the services of GENEDGE Alliance to evaluate the R&D Center and plot a path forward that would build upon the R&D Center's assets and allow it to grow into a recognized resource within the United States' southeastern region.

Months of study, conversation, and analysis led to a set of recommendations including:

- Revised mission statement
- Refined provided services
- Identified target customers

At the conclusion of the study, GENEDGE consultants set forth a bold final recommendation: Rebrand the R&D Center with a new name focused on the new, clearer mission statement.

SVHEC leadership engaged the services of Letterpress Communications to lead them through a multi-phase rebranding exercise that involved internal conversations, surveys with former and prospective R&D clients, and an R&D client focus group.

R&D Center for Advanced Manufacturing & Energy Efficiency will be rebranded as...\*drumroll\*

# ProductWorks!

#### Your vision. Our resources.

ProductWorks@SVHEC is the manufacturing resource that brings your vision to life. Industrial partners and entrepreneurial start-ups collaborate with our team in an innovative and efficient product development environment. From design planning and prototyping to testing and small production runs, ProductWorks is your one-stop shop where technology, creativity and industry insight connect.

#### **ProductWorks Services**

- Short production runs
- Prototyping including design briefs, refined design of manufacturing drawings and initial production runs
- Planning, support and troubleshooting
- Industry 4.0 knowledge with expertise in selected areas of implementation

"The R&D Center has enjoyed a lot of success, but we

wanted a name and tagline
that more accurately
reflects the services we
provide to the region.
What we learned from
past clients in a very lively
virtual focus group is that
it's all about the "product"
helping clients bring
life to their product ideas,
from concept to prototype
to production."
Dr. Betty H. Adams,
SVHEC Executive Director

"As a small business consultant, I see firsthand the challenges entrepreneurs face in bringing new products to market. ProductWorks is an invaluable resource within the regional entrepreneurial ecosystem. During the focus group, it was clear that ProductWorks' services are unparalleled and provides



Southern Virginia's start-ups and entrepreneurs with services that rival those of much larger metropolitan areas." — Lin Hite, Longwood Small Business Development Center Regional Director

# RESPONDING TO COVID-19

## **RESPONDING TO COVID-19**

# Responding to COVID-19: Finding opportunities to support the region

What started as a deadly virus a world away made its way to the United States and the Commonwealth of Virginia in February 2020. As SVHEC leadership watched COVID-19 spread, they began preparing for the virus' inevitable impact.

First came increased cleaning and sanitizing and canceling the Workforce Training Completion Ceremony. Two weeks later came the notice of SVHEC closing until further notice, and the majority of staff began teleworking.

While COVID-19 abruptly changed HOW the SVHEC does business, it did not disrupt WHY we serve. As the days stretched into weeks and months, SVHEC staff demonstrated an ability to adapt and continue finding ways to serve Southern Virginia.

#### The New Normal: COVID-19 Brings Abrupt Change to SVHEC's Way of Life

On Sunday, March 22, SVHEC staff received an alert that brought their way of life to a screeching halt: Due to COVID-19, SVHEC would be closed until further notice and staff would begin teleworking. Staff members quickly made adjustments as they turned kitchen tables into desks, and online meetings replaced the conference room. For some, there were newfound challenges like working with young children at home or battling for bandwidth.



**Meagan Owen**, coordinator of Learner Success and Engagement stated, "I'm an early riser and my most productive time is before the sun comes up. I break my





day up to get in a few hours before my children get up and a few while they nap. We're just figuring out what works one day at a time."

Institutional Effectiveness & Grants Administrator **Catherine Stevens** found Internet connectivity especially challenging. "We have two teleworkers and two college students in the house, and we live in an area with no fiber connectivity," she said.

For an agency built on partnerships and collaboration like the SVHEC, working alone or with virtual contact was unfamiliar territory. **Virginia Byrd**, SVHEC Finance and Student Services administrator, said, "I enjoy not having to dress up for work, however, I really miss personal interactions with my coworkers...my other family!"

SVHEC Communications worked with departments to facilitate online information sessions and webinars.

The SVHEC's Ops Team (Operations and IT) are credited with allowing the agency to make a seamless transition into the new virtual meeting environment. SVHEC Board of Trustees held virtual committee meetings and its June 3rd board meeting via Zoom with a simulcast on the SVHEC's Facebook page to meet FOIA requirements. SVHEC Communications worked with departments to facilitate online information sessions and webinars. As SVHEC leadership looks towards work in a post-COVID world, SVHEC Executive Director Dr. Betty Adams hopes to hold onto some virtual elements. "While I do not particularly like Zoom meetings, I am finding that virtual events can be both efficient and effective. I hope we will continue to use the virtual platform in addition to face-to-face events even after we are back to normal operations. It is a powerful and convenient way to share information and conduct business," she said.



#### SVHEC, SVCC Donate Personal Protective Equipment to Sentara Halifax Regional Hospital

As COVID-19 spread across the Commonwealth of Virginia, there were rampant reports of personal protective equipment (PPE) shortages. During a March 24, 2020 COVID-19 briefing, Governor Ralph Northam issued a state-wide call to action asking for donations of unused PPE.

We've been truly touched by the generosity of our community during this time. We appreciate SVHEC and SVCC remembering us for their donations. 777

Staff at the Southern Virginia Higher Education Center (SVHEC) responded without hesitation, connecting with instructors and partners at Southside Virginia Community College (SVCC) to donate PPE originally purchased for hands-on training exercises.

After going through the supply closets for

the SVHEC's Center of Nursing Excellence, SVCC's biology and anatomy and physiology classes, and the Welding@SVHEC program, SVHEC and SVCC staff gathered more than 100 masks, 94 gowns, 77 boxes of gloves, face shields, shoe covers, hand sanitizer, and alcohol preps. All items were donated to Sentara Halifax Regional Hospital.

"We've been truly touched by the generosity of our community during this time. We appreciate SVHEC and SVCC remembering us for their donations," said Faith O'Neil, then customer development and marketing consultant with Sentara Halifax Regional Hospital.

SVHEC staff responded to the COVID-19 crisis by donating PPE to instructors and partners at Southside Virginia Community College.







SVHEC R&D Center supports local efforts to make aerosol boxes for medical staff treating COVID-19 patients.



When South Boston urologist (Urology of Virginia) and Chief of Surgery (Sentara Halifax Regional Hospital) Dr. Christi Hughart learned of aerosol boxes being used to protect healthcare workers caring for COVID-19 patients, she knew she had to make these available in Halifax County. Dr. Hughart quickly set up a Facebook donation campaign to

raise money to make the boxes locally.

I knew this would be a great thing for the R&D Center to be involved with, and that it would be great for us to use our machines and talents to help the community.

- Christopher Walker

Christopher Walker, SVHEC CAD/CAM technician, heard about the project and knew the agency's R&D Center with its specialization in product design and development and prototyping could help. "I knew this would be a great thing for the R&D Center to be involved with, and that it would be great for us to use



Aerosol boxes being built for medical staff treating COVID-19 patients (this image); finished boxes (below)





a medical training class.

our machines and talents to help the community," Walker stated.

The aerosol box was designed by Taiwainese doctor Dr. Hsien Yung Lai as a low-cost method of protecting medical staff during the COVID-19 outbreak. Made of plexiglass, the box covers the patient's head and helps to contain the aerosolized body fluids that providers are exposed to when intubating a patient.

After speaking with Dr. Hughart, and using Dr. Lian's photos as a reference, the SVHEC's R&D staff, Jerry Elliott, Lily Toombs, and Walker, got to work. R&D staff created a computer aided design (CAD) file, wrote the program to produce the aerosol box's components on R&D's waterjet machining center, and assembled the components. After creating an initial prototype that was approved by Dr. Hughart, Elliott, Toombs, and Walker produced 11 aerosol boxes.

The boxes went to Halifax and Turbeville EMS, and SOVAH Health-Danville.

"I just felt in my heart it was a good thing for everyone involved. Hopefully we'll be able to keep our doctors and nurses on the front line of this terrible virus a little safer," Walker said.



#### **Back to Class with Social Distancing**

Social distancing was on everyone's mind and lips as COVID-19 swept through the nation. The school year came to an abrupt end for Career Tech Academy Mechatronics students just as they were starting to review for the end-of-year Siemens Mechatronics Certification exam. CTA staff virtually worked with students to help them review, and on May 19th every CTA-Mechatronics student came back to campus to sit for the Siemens certification. "They weren't required to come back, but every single student showed up. I'm super proud of their dedication," said CTA administrator Stephanie Robinson.

# **CREATING** NEW SPACES

## **CREATING NEW SPACES**

#### Renovating the 820 Bruce Street Building

After nearly 20 years of occupying the historic former tobacco processing warehouse on 820 Bruce Street, the SVHEC building was in need of several costly repairs including a new roof. SVHEC submitted a detailed plan to the Commonwealth's Department of Planning and Budget and Department of Engineering and Buildings and was approved for funding from the VCBA Pooled Bond Fund. Additional funds from the Capital Maintenance Reserve Fund were approved to make fire safety updates to the 820 Bruce Street building's lower level and to replace the windows in the Innovation Center.

Then came the hard part: relocating classes, computer labs, and offices in preparation for a large-scale construction project. Over the summer of 2019, SVHEC's Operations and IT teams upfitted the SVHEC's Innovation Center to accommodate the influx of students.

The fall semester started with a seamless transition every class had a space to meet, every staff and partner had work space, and multiple options were available to every student who needed computer and printer access.

> 820 Bruce Street lobby before renovation (top right) and after (lower right)







SOUTHERN VIRGINIA

SOUTHERN VIRGINIA HIGHER EDUCATION CENTER

#### 820 Bruce Street Building Renovations

- New roof with lightning rod protection installed
- Twenty HVAC units replaced
- All carpet and tile replaced
- Two roof-top water towers painted
- Lobby's front desk reconfigured to add more work and storage space
- New semi-private office added to the lobby
- Lobby and hallways painted
- New front doors installed

- 2,162 square feet of unfinished space renovated to allow for the IT Academy's expansion (funds provided by a donation from Microsoft Corp and SVHEC funding)
- Fire safety updates to the lower level (funds provided by the Commonwealth's Capital Maintenance Reserve Fund)





**This page and facing page:** Renovations transformed the old R&D Center space into a new Automation & Robotics Lab divided into two working spaces.

While the majority of renovations focused on the 820 Bruce Street building, the Innovation Center also saw significant changes. All exterior windows were replaced (funds provided by the Commonwealth's Capital Maintenance Reserve Fund), and 8,800 square feet of the former R&D Center space was renovated and converted into a new Automation & Robotics Lab for the Career Tech Academy. Additional updates included:

- All cement flooring was epoxied
- Walls constructed to separate the space into two working lab spaces
- Windows added so instructors and lab techs can maintain sight of all students and equipment

A portion of the 8,800 square foot space will also be used for Welding@SVHEC's American Welding Society Accredited Testing Facility activities.



## **UPDATED WEBSITE**

Just as the SVHEC's physical location was updated in FY 2020, its online home was refurbished as well. The Southern Virginia Higher Education Foundation provided financial support for the SVHEC to work with Richmond-based marketing firm Padilla to design a custom website.

The new site has an updated design, simplified menu, streamlined text, to make visiting SVHEC on the web a more user-friendly experience. Student highlights throughout the website call attention to SVHEC's impact, and allow visitors to see that "Your Opportunity Lives Here" is much more than a tagline.



The original website (above) and the newly redesigned homepage (facing page)



About SVHEC Student Resources

**College Degrees** Job Training **Business Resources**  **Community Resources** 



## We are Southern Virginia's epicenter of education and training.

At the Southern Virginia Higher Education Center (SVHEC), you can advance your education and career from right where you are. The SVHEC provides access to the affordable, convenient college degree and job training programs that can change your life - with the flexible scheduling and financial assistance to make it work. Here, you can begin to open doors that you never knew existed. You can unlock confidence in your knowledge, pride in your accomplishments and the specific skills and abilities to propel you forward. The SVHEC is an epicenter of education and training, and there's opportunity for everyone in our communities. Your opportunity lives here.



We know that money can be a challenge, but we don't want that to stop anyone!



#### **Class Schedules**

Get a full list of class schedules for job training, degree programs, certifications and more.



#### **Career Resources**

We believe giving you the employability skills to gain and keep a job is an important step.

# **ECONOMIC IMPACT**

**Credentials Earned through SVHEC** Workforce Training Programs

## 88%

Workforce Training Program Completion Rate **)** 29,889\*\*

Workforce Training Hours Delivered **U 519** Tutoring Hours Provided by the Volunteer Literacy/ESL Program

Community College Career Studies Certificates Awarded to Career Tech Academy Students

**573%** Workforce Training Students Who Received Financial Assistance through the Commonwealth's NEWCGP

\* Credentials earned were impacted by the COVID-19 shutdown. Prior to that,

- credentials were on track to show a marked increase over FY 2019's number;
- \*\* Training hours were also impacted by the COVID-19 shut down



TOTAL AGENCY EXPENDITURES: STATE FUNDING:



# **ENROLLMENT**

#### FOR CREDIT TOTAL STUDENTS: 1,316\*



\* 15% increase from FY2019

#### AMONG COMMUNITY COLLEGE STUDENTS: 1,202



#### LITERACY TOTAL STUDENTS: 102



#### **CAREER TECH ACADEMY: 32**



#### WORKFORCE TRAINING: 137

MALE	_		66%*	91
NON-WHITE	42%	57		

\* We saw a 15% increase in the number of female workforce training students



# **Partners and Affiliates**

3PK	Danville Community College	
ABB	Danville-Pittsylvania Chamber of Commerce	
ACT	Danville Transit System	
American Heart Association	Department of Rehabilitative Services	
American Welding Society	Destination Downtown South Boston, VA	
AmeriCorps ServelT	Dollar General Distribution Center	
Al Veeck-MVA, Inc.	Dollar General Literacy Foundation	
Arrington's Home Furnishings, Inc.	Dynovis (formerly Lindstand)	
Automation Technologies, Inc. (ATI)	Elliott Electric, Inc.	
Averett University	Essel Propack	
Boxley	Firebird Manufacturing, LLC	
Charlotte County Public Schools	Great Opportunities in Technology and Engineering Careers (GO-TEC)	
Ronnie B. Cole, LLC.	Halifax County Board of Supervisors	
Comfort Systems USA	Halifax County Chamber of Commerce	
Commonwealth Graduate Engineering Program	Halifax County Industrial Development Authority	
CompTIA, Inc.	Halifax County Public Schools	
County of Halifax	Health Occupations of America (HOSA) Virginia Chapter	
Dan River Region Collaborative	Health Resources & Services Administration (HRSA)	

Huber Engineered Woods, LLC New College Institute Institute for Advanced Learning & Research Non Typical Outdoors Intelliverse Solutions Group, LLC. Old Dominion University InterTape Polymer O.S. Kelly Company International Woodworking Fair-Atlanta **Piedmont Community College** JP Superior Solutions Pearson Vue Assessment and Testing Center@SVHEC Lewis Metal Works Perspecta The Lincoln Electric Company Pittsylvania County Public Schools Longwood Small Business Development Center, Presto Products Company, South Boston Western Region Propel GPS Longwood University Prince Edward County Public Schools Longwood University's Institute for Teaching Through Power Systems & Controls (PS&C) Technology & Innovative Practices River City Systems, Inc. Manufacturing Skills Standards Council (MSSC) Rogers Heating & Cooling Mecklenburg County Public Schools Sentara Halifax Regional Hospital Merck & Co., Inc. Siemens Mechatronic Systems Certification Program Microsoft Corporation South Central Workforce Development Board Microsoft Data Center Southern Piedmont Technology Council (SPTC) Mid-Atlantic Test & Balance Southern Virginia Higher Education Foundation Mid-Atlantic Broadband Communities Corporation Southern Virginia Regional Medical Center Morgan Lumber Company, Inc. Southside Community Services Board National Center for Construction Education Southside Health Education Foundation and Research (NCCER) Southside Outreach Group National Health Services Corp

Southside Virginia Community College Southwest Virginia Alliance for Manufacturing Center of Excellence (SVAMCOE) SoVAH Health-Danville Steinway & Sons Strategic Heating and Air, Inc. T5 Datacenters TEKSystems The Lincoln Electric Company The Chastain Home for Gentlewomen The Prizery Topp Line, Inc. Town of Halifax Town of South Boston United States Forest Service an agency of the U.S. Department of Agriculture)
VCU-Community Memorial Health Center
Virginia Health Workforce Development Authority
Virginia Technical Institute
Virginia Tobacco Region Revitalization Commission
Virginia Career Works, Central Region — Lynchburg
Virginia Career Works-South Boston Center
Virginia's New Economy Workforce Credential Grant Program (NEW CGP)
Wal-Mart Distribution Center
West Piedmont Workforce Development Board
Workforce Innovation & Opportunity Act (WIOA) Case Managers





Contact the SVHEC Communications Office: **434-572-5446** | **info@svhec.org** to tour our facility and sneak a peek at our hands-on training programs, labs and state-of-the-art technology that produces viable products and a skilled workforce.

### CONNECT WITH THE SVHEC

434-572-5440 or toll free 1-800-283-0098 Email: info@svhec.org | Fax: 434-572-5462 820 Bruce Street, South Boston, VA 24592

Find us on Facebook 📑/svhed | Twitter 💆@svhed