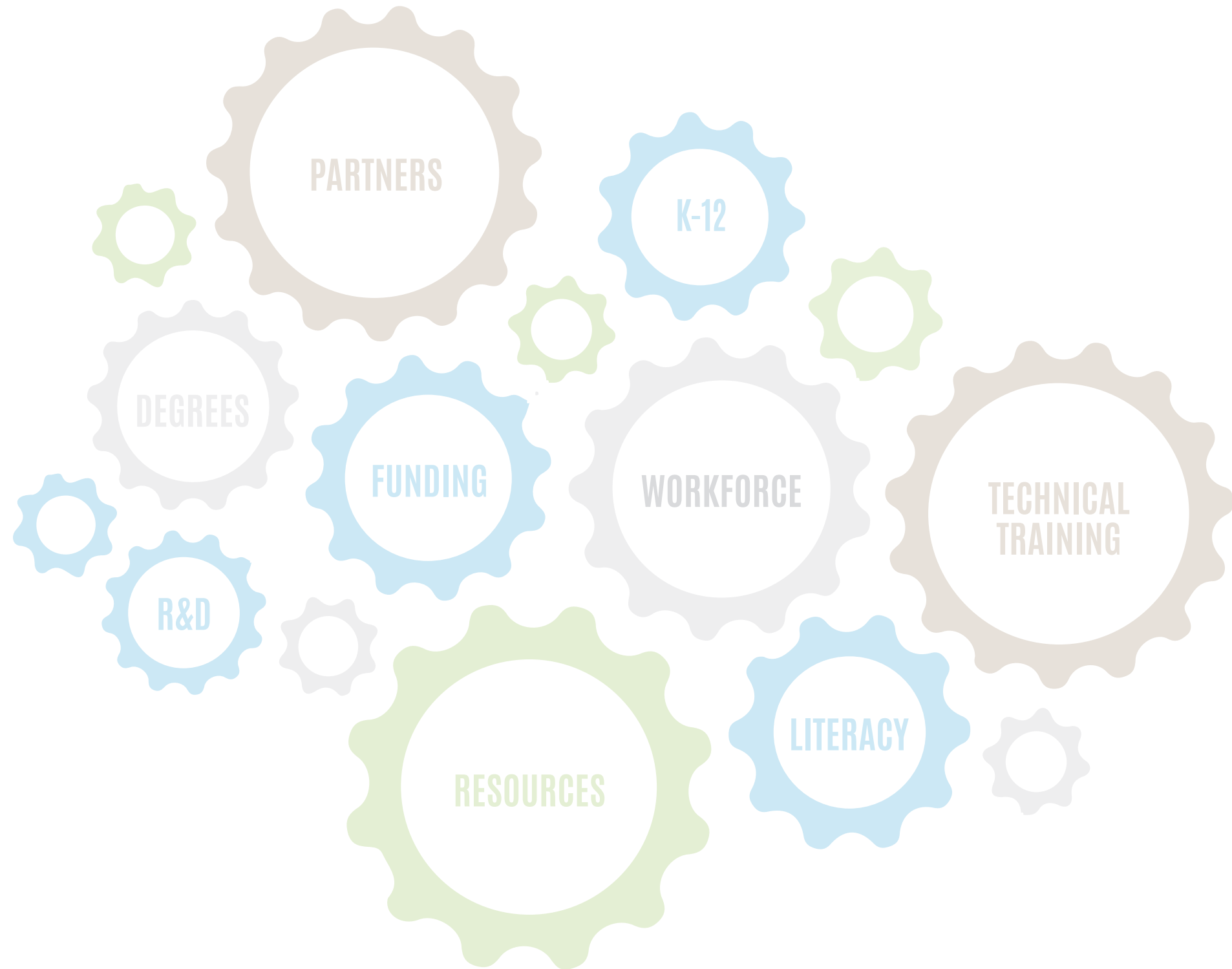


SOUTHERN VIRGINIA HIGHER EDUCATION CENTER

BUILDING CONNECTIONS

2018
ANNUAL REPORT





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MESSAGE FROM THE EXECUTIVE DIRECTOR



Dr. Betty H. Adams has served as the SVHEC's executive director since 2009.

Nothing captures the SVHEC's commitment and motivation better than our motto,

"OPPORTUNITY LIVES HERE."

For 32 years, the SVHEC has been advancing economic opportunities in Southern Virginia by building essential educational connections. The FY2018 Annual Report highlights how the SVHEC and its partners and affiliates are connecting workers and employers with the skills, credentials, degrees, and resources required to succeed in the New Virginia Economy. These are the connections that will keep jobs and people in the region we love: connections to literacy, technical training, degrees, research and development technology, and supporting resources. Perhaps most exciting is our growing connection to the next generation – K-12 students – that promises to build a solid pipeline of skilled and confident adults who can take transforming Southern Virginia from dream to reality.

The SVHEC has grown this year – increasing enrollments in signature programs like the IT Academy and Volunteer Literacy Program (VLP), and preparing to launch new ones like its Career Tech Academy. Equally exciting is the economic potential of ventures on the front burners of the R&D lab this year.

In FY2018, the SVHEC also focused on breaking down barriers to education and employment by increasing connections to fundamental resources like financial assistance, transportation, and housing. These are the connections that enable eager minds to shift their focus from logistics to learning.

In closing, and on behalf of the entire SVHEC team, I want to thank our many extraordinary partners. Our success is your success because collaboration is at the heart of everything we do. Without your help, the accomplishments revealed in this report would not have been possible.

A handwritten signature in black ink that reads "Betty H. Adams".

—Dr. Betty H. Adams
Executive Director, the SVHEC



THE SVHEC'S IMPACT AT A GLANCE

OPPORTUNITY
LIVES
HERE.



THE MISSION:

Advancing the economic potential of Southern Virginia through education, innovation and collaboration.



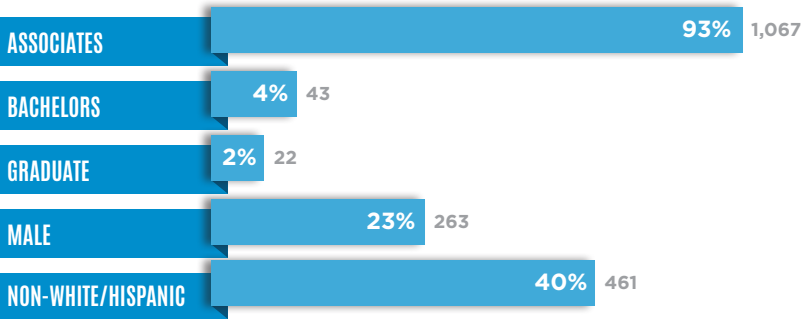
THE VISION:

Educational Victories = Economic Strength



ENROLLMENT

FOR CREDIT TOTAL STUDENTS: 1,145



AMONG COMMUNITY COLLEGE STUDENTS: 1,067



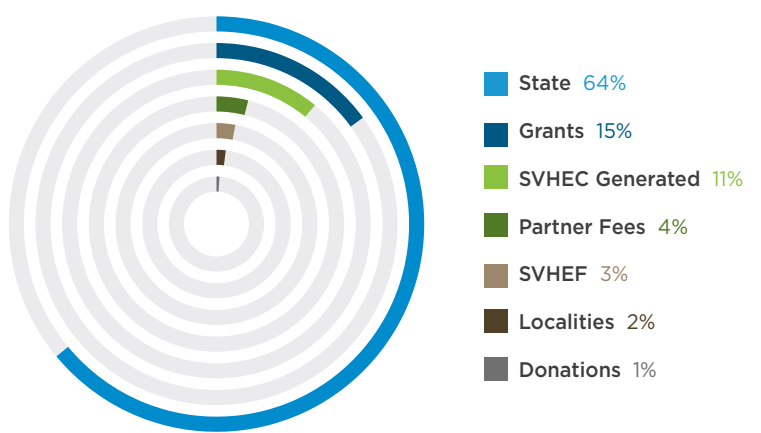
LITERACY TOTAL STUDENTS: 244



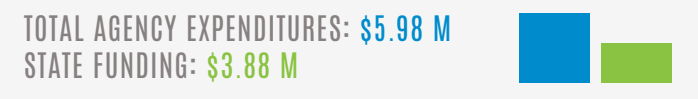
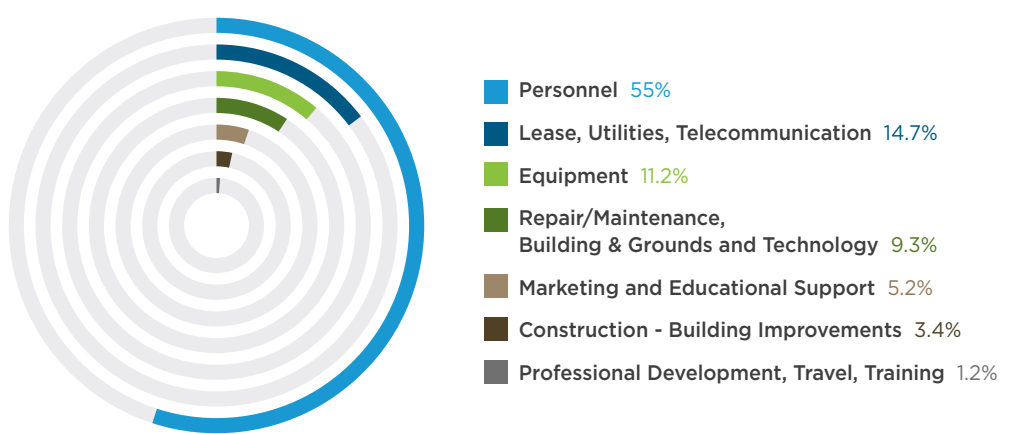
WORKFORCE TRAINING: 295



REVENUES



EXPENSES



EXECUTIVE SUMMARY

CONNECTING SOUTHERN VIRGINIANS TO OPPORTUNITY

K-12 CONNECTIONS

It's never too early to begin thinking about careers, which is why the SVHEC commits significant resources to K-12 outreach. Well-paying STEM-H jobs are available in the region, and the SVHEC worked hard in FY 2018 to make K-12 audiences aware of STEM-H jobs and where training is available to qualify for these jobs. By joining forces with two other Virginia Higher Education Centers (IALR and NCI) and ramping up the Experience SVHEC program, the SVHEC touched 6,102 K-12 students. We are proud to have attracted the largest turnout in the Commonwealth for the Capital One Coders Experience. (p. 10)

Through the Capital One One-Day Coders Experience, the SVHEC introduced 107 sixth, seventh, and eighth grade girls from across the Southern Virginia to problem-solving, teamwork, and basic principles of software development.

LITERACY CONNECTIONS

Increased literacy levels mean higher levels of employment, pay, and productivity. Because literacy rates in Southern Virginia lag behind other areas, (8 percent of the population has attained an 8th grade or lower education level compared to 4 percent

in Virginia overall), literacy has always been part of the SVHEC program mix. Since 1987, the SVHEC has provided literacy-based programs under the Volunteer Literacy Program (VLP). Financed completely with grant funding, including substantial support from Dollar General Literacy Foundation, VLP enrollments have grown significantly in 2018. We served 134 new English as a Second Language and Adult Basic Education students in FY 2018—up from serving 67 students in FY 2017.

TECHNICAL CONNECTIONS

The true ratio of jobs in our economy is 1:2:7.^{1,2} Every occupation that requires an advanced degree (1) is supported by two (2) professional jobs requiring a university degree, and seven (7) technical jobs often requiring a short-term credential. These well-paying technical jobs are in great demand but are going unfilled in the region because of a lack of skilled workers. The SVHEC has tackled this skills gap by developing a series of short-term, hands-on and stackable credential-based programs in high demand areas. In FY 2018, the SVHEC poured energy into launching the **Career Tech Academy, a new initiative that provides regional high school juniors and seniors with access to in-demand technical training.** (p. 19)

DEGREE CONNECTIONS

Since its inception, the SVHEC has been connecting citizens to in-demand degrees through partnerships with degree-granting institutions. Local community college partners, Danville Community College (DCC) and Southside Virginia Community College (SVCC), provide one-year certificates and two-year degrees in high demand areas including healthcare, business, human services, and college parallel. Four-year partners Old Dominion University (ODU) and Longwood University provide access to a variety of bachelor's and master's degree programs. **The SVHEC's Center of Nursing Excellence collaborated with Southside Virginia Community College to host "ER at SVHEC," an emergency training simulation for Southside Virginia Community College nursing and EMT students in 2018.** (p. 24)

¹ Gray, K. & Herr, E. (2006). *Other Ways to Win: Creating Alternatives for High School Graduates. Third Edition.* Thousand Oaks: Corwin Press.

² U.S. Bureau of Labor Statistics. *Occupational Outlook Handbook 2012-13.* Office of Occupational Statistics and Employment Projections.

R&D CONNECTIONS

The SVHEC strengthens the region's advanced manufacturing sector by connecting manufacturers and entrepreneurs to training, production, proof-of-concept, and commercialization services through the Research & Development Center for Advanced Manufacturing & Energy Efficiency (R&D CAMEE). **Read on to learn about the Blind Stapler Tool, this year's proof-of-concept and commercialization work with potential to become a new manufacturing enterprise. R&D CAMEE also works closely with the Commonwealth's research universities on ventures that hold economic potential for Southern Virginia such as Cross Laminated Timbers.** (p. 26)

RESOURCE CONNECTIONS

In 2018, the SVHEC provided connections to important resources that increased access to education and improved the general quality of life:



Financial assistance: Thanks to a number of scholarship, grant, and tuition assistance resources, technical training participants and degree students gained access to a variety of educational opportunities in 2018. (p. 29)



Transportation: By preventing access to education and jobs, lack of dependable transportation is a key contributor to poverty. The SoVA Regional Transportation Project, a three-year initiative led by the SVHEC, is addressing transportation needs through an effort to establish two new rural bus routes in high transportation demand areas. Significant progress was made this year: a transit provider was identified and approved, funding to cover locality costs was secured, and grant funding to purchase the new buses was approved. (p. 31)



Housing: It's a challenge to further your education when you don't have a stable place to live and study. The SVHEC partnered with Southside Outreach and the Town of South Boston to develop The Poplar Creek Homes project, a low and moderate-income housing development. The SVHEC will develop workforce training for future Poplar Creek Homes residents and will oversee funding development to integrate solar panels and an energy micro-grid to further lower the cost of housing. (p. 35)



Healthcare: The CNE and SVHEC Area Health Education Center (AHEC) continued focusing the "Nursing is Here" campaign on stemming the regional nursing shortage. According to a July 2017 report by the U.S. Department of Health and Human Services' Bureau of Health Workforce, Virginia is projected to have a shortage of 4,400 licensed practical nurses by 2030. The SVHEC also played a significant role in securing legislation to establish the Henrietta Lacks Commission, which will oversee development of the Henrietta Lacks Life Sciences Center in Halifax County.

PARTNER CONNECTIONS

The SVHEC would not be where we are today without our 94 partners and affiliates. Collaboration is at the heart of everything we do. Of course, we are also grateful to our 55 employees who are the gears that help our operations function on a daily basis.

Join us on an exploration of the connections that drive the SVHEC. You can set off on a lateral course, flipping through the next pages in order, or you can jump around by flipping to the pages cited above.

ABOUT THE SVHEC



The mission of the Southern Virginia Higher Education Center (SVHEC) is to advance Southern Virginia's economic potential through education, innovation and collaboration.

Located in South Boston, more than 75 minutes from the nearest state-supported four-year institution and on the fringes of the closest community colleges, the SVHEC provides vital educational access and workforce training to an underserved rural population. By serving as an incubator, broker and developer of innovative educational and applied research pathways, the SVHEC is focused on retooling Southern Virginia's rural workforce for jobs in the new economy.

Since 1986 the SVHEC has provided access to affordable post-secondary education by forging unique alliances with academic and industry partners. The SVHEC began operations in a 500-square-foot mobile unit on the grounds of the local high school.

Thanks to a long history of community- and partner-based support, the SVHEC has grown from serving a handful of students in its original location to serving more than 1,400 for-credit students and more than 300 workforce training participants.

Currently located in two repurposed tobacco warehouses donated and renovated with support of local benefactors, tax credits, and grants, the SVHEC now provides 100,000 square feet of technically sophisticated educational space that prepares trainees for Science, Technology, Engineering, Math, and Healthcare (STEM-H) careers including nursing, IT, and advanced manufacturing.



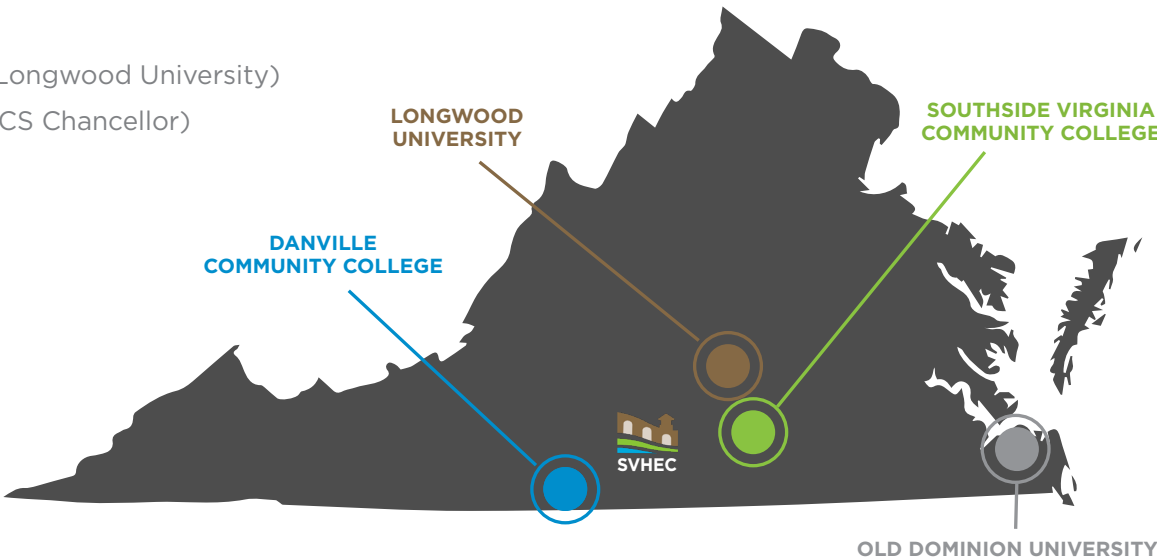
GOVERNANCE

2017-2018 BOARD OF TRUSTEES

- Mr. Peter Blake
- Mr. Gerald “Jay” Burnett
- Ms. Mattie Cowan
- The Honorable James Edmunds
- Mr. Doug Lee
- Mr. John Lee
- Mr. Paul Nichols
- Dr. Ken Perkins (Designee of President Reveley, Longwood University)
- Mr. Tom Raab (Designee of Dr. Glenn DuBois, VCCS Chancellor)
- Dr. Al Roberts
- Dr. Bruce Scism
- The Honorable Frank M. Ruff
- The Honorable Dennis Witt
- Dr. Charlette Woolridge
- 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



K-12 CONNECTIONS



CONNECTING K-12 STUDENTS TO IN-DEMAND, HANDS-ON CAREERS

We believe the work of preparing Southern Virginia’s future workforce begins today. That’s why we are laser-focused on introducing K-12 students to exciting, STEM-H careers. We ignite interest and connect students with career pathways through engaging, hands-on activities.

EXPERIENCE SVHEC

These interactive, 90-minute tours introduce K-12 students to careers in information technology, mechatronics, welding, and healthcare. Students tour SVHEC training facilities, meet program leaders who share information about careers and hands-on training, and participate in hands-on demonstrations. In FY 2018, we connected with 685 K-12 students from 12 different schools and four counties.

“ Our students were able to explore several different careers and discovered what kinds of job opportunities are available right in our area. The SVHEC field trip inspired our students to think more about their futures. ”

—Jessica Wright,
Clarksville Elementary School guidance counselor





K-12 CONNECTIONS

SVHEC-AHEC OUTREACH: INSPIRING THE NEXT GENERATION OF HEALTH CARE HEROES

The SVHEC-Area Health Education Center (SVHEC-AHEC) is federally funded through the Virginia Health Workforce Development Authority (VHWDA) and was created to facilitate the development of a statewide pipeline of future health professionals. This funding allows us to connect K-12 students and young adults to health professions. Through customized, age appropriate hands-on presentations, career fair exhibits, and health careers exploration through individual and small group health careers counseling, we bring the heart-racing excitement of healthcare careers to life. In FY 2018, we reached 1,051 learners while maintaining regular contact with a database of more than 3,800 individuals.



K-12 CONNECTIONS



STEM-H SUMMIT AND CAREER CHOICE YOUTH EXPO:

Each year, the SVHEC joins with our Southside Higher Education Coalition partners, New College Institute (Martinsville) and the Institute for Advanced Learning & Research (Danville), to co-sponsor the STEM-H Summit and Career Choice Youth Expo. The STEM-H Summit is held at the Institute for Advanced Learning & Research in the spring and brings together more than 250 eleventh and twelfth grade students, teachers, and regional business and community leaders over two days to advance STEM-H education and workforce development in Southern Virginia. SVHEC provides engaging workshops for student attendees and staffs two information tables to provide resources for hands-on workforce training and STEM-H career pathways.

The Career Choice Youth Expo is held in the fall at the Olde Dominion Agricultural Center in Chatham. Over two days, more than 3,800 seventh and ninth grade students from the counties of Halifax, Henry, Patrick, and Pittsylvania and the city of Danville attend the Expo where they are introduced to a large number of career clusters in Southern Virginia. SVHEC staff provides information and hands-on demonstrations to promote the STEM-H careers of mechatronics, welding, and healthcare.

“ My favorite experience was seeing the look of awe in the kids’ eyes when they made a learning connection. ”
—Career Choice Business Participant





K-12 CONNECTIONS

CAPITAL ONE CODERS EXPERIENCE

The SVHEC connected rural middle school girls to computer coding and tech careers when it hosted the Capital One Coders Experience on October 21, 2017. A one-day event sponsored by the Commonwealth's Secretary of Technology, Karen Jackson and powered by Capital One, the Coders Experience introduced sixth, seventh and eighth grade girls to problem-solving, teamwork, and basic principles of software development. Instruction was provided by Capital One employees who donate their time and expertise to serve as instructors and mentors. After instruction, students worked in teams to develop a mobile application.

With 107 girls from across Southern Virginia and as far away as Glen Allen, Chesterfield, and Williamsburg in attendance, the SVHEC hosted the largest of the 10 Coders Experiences.



Opportunities like this are invaluable because they expose students to possibilities that they may not have known existed. Several parents commented that their daughters were so excited they went home and started designing their next app. Maybe the next million-dollar app will be developed by a young woman who got her start at the Coders Experience.

—Amy Cole, SVHEC Director of Student & Partner Advancement



LITERACY CONNECTIONS



CONNECTING FAMILIES TO FOUNDATIONAL LEARNING TO BUILD CONFIDENCE, CAREERS, AND RELATIONSHIPS

CHANGING LIVES ONE AT A TIME

Literacy is the foundation upon which all other learning occurs. This core tenet has been at the heart of the SVHEC's commitment to providing free, confidential, one-on-one literacy tutoring for nearly 30 years. With one part-time staff member and several dedicated volunteers, the SVHEC's Volunteer Literacy Program changes lives one by one, week by week.

In FY 2018, the SVHEC Volunteer Literacy Program:



Served 132 new literacy students.



Exceeded program service goals by 88%.



Provided more than 700 hours of literacy and English as a Second Language instruction.





LITERACY SUCCESS STORY: SUZANA JUBEL



In June 2017, civil engineer Suzana Jubel left her home country of Brazil and the work and home she loved to move to the United States so that her husband Eduardo could pursue his career at ABB in South Boston. Suzana went from a blossoming career to daily struggles because she didn't speak English.

"I couldn't even go to the supermarket or pharmacy because I couldn't speak English, and I didn't know what to do," she said. She told Eduardo she needed help, and an Internet search led him to the SVHEC's Volunteer Literacy English as a Second Language (ESL) program. Suzana enrolled and began working one-on-one with Volunteer Literacy/ESL coordinator Judy Ward.

Initially, Judy wrote out every word and phrase as she introduced Suzana to English. With each session, Suzana's vocabulary increased, and in less than a year, she was able to carry on a full verbal conversation. Now, Instead of avoiding the grocery store, she confidently shops for, and hosts, dinner parties. Trips to the pharmacy are routine, and she's now gained the confidence to re-enter the workforce. She recently completed her first English-only interview, and she can't wait to wear her engineer's hat again.

"Judy is amazing. She's really nice, and she supports me. It's been a very good experience," Suzana said.



LITERACY SUCCESS STORY: JEREMIAH FORE

After moving from Fredericksburg, VA, Jeremiah Fore came to the SVHEC to pursue training in information technology through Southside Virginia Community College. As he began the enrollment process, Jeremiah took the college's placement test and was shocked to learn his results. Though he earned high marks in math and on the multiple choice English section, he scored a zero—no points—on the writing section.

Jeremiah's college counselor referred him to the Volunteer Literacy Program for tutoring. Literacy Coordinator Judy Ward worked with Jeremiah on sentence and paragraph structure and provided tips to move him past his writer's block. Within a few weeks, Jeremiah's writing improved dramatically, and he was ready to retake the writing section of the placement test.

"For my second experience, I didn't really experience much writer's block. I was prepared and in the proper mindset. Mrs. Judy really helped me get to that point." His re-test results were astoundingly better. After working with Judy Ward, Jeremiah was placed into English 111 (College Composition), avoiding the series of developmental English classes prescribed by his first test results.





LITERACY CONNECTIONS

ENGLISH AS A SECOND LANGUAGE (ESL) PARTNERSHIP WITH HALIFAX COUNTY PUBLIC SCHOOLS

Connecting the non-native English speaking parents of Halifax County Public Schools' students with the resources needed to enhance their English speaking abilities.

Imagine being a non-native English speaker with a child enrolled in an English-speaking school. How would you help with homework or complete the required forms sent home during the first days of school? Seeing a need to reach non-native speaking parents as well as their children, Halifax County Public Schools (HCPS) partnered with the SVHEC's Volunteer Literacy Program to establish a language computer lab. HCPS provided the language learning software (Rosetta Stone and Duolingo), and the SVHEC made one of its computer labs available to HCPS parents.

AS A RESULT OF THIS PARTNERSHIP:



HCPS parents without computers have been able to access **important language learning tools and increase their English speaking abilities.**



SVHEC's ESL program has had an **increase in students seeking one-on-one tutoring.** A group of 10 HCPS students regularly attends SVHEC ESL classes.

LITERACY CONNECTIONS



DO IT FOR YOUR CHILDREN (DIFYC)

Connecting parents with skills to support their child's academic success.

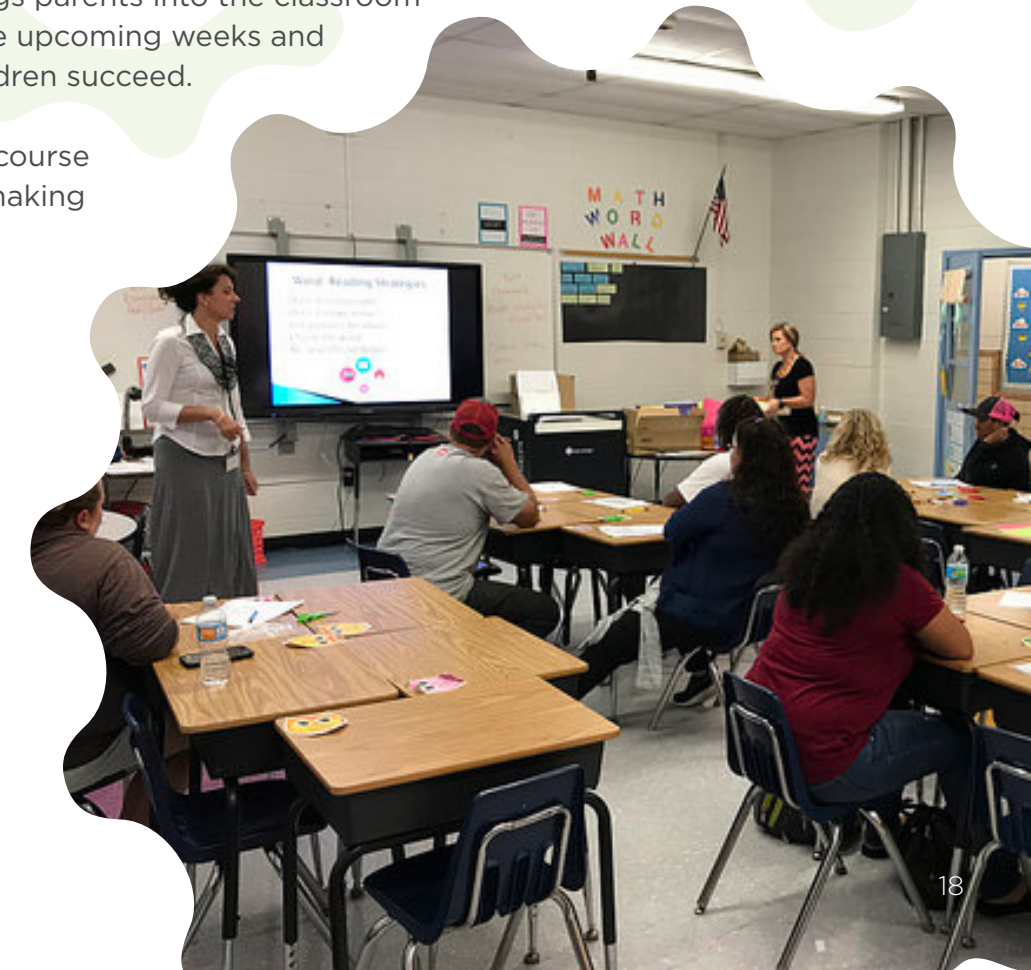
Ever tried helping your young child with his homework only to find yourself mystified? Thanks to a \$10,000 grant from the Dollar General Literacy Foundation, the SVHEC Volunteer Literacy Program was able to offer its successful Do It For Your Children (DIFYC) outreach program to Sinai Elementary School (Halifax County). Originally piloted with two Halifax County elementary schools in 2015, DIFYC brings parents into the classroom to preview lesson plans of the content that will be covered in the upcoming weeks and arm themselves with the knowledge they need to help their children succeed.

Teachers and excelling students work with parents to cover the course material, answer questions, and provide tips and strategies for making literacy and learning part of everyday life. To make it easy for parents to attend, DIFYC provides meals and childcare.



THE RESULT:
72 parents served

“ I liked the hands-on learning for parents. ”
—DIFYC Parent Participant





TECHNICAL TRAINING CONNECTIONS

CONNECTING K-12 TO INDUSTRY RECOGNIZED CERTIFICATIONS AND IN-DEMAND SKILLS

Public schools are facing increasing pressure to provide Career & Technical Education (CTE), but CTE programs are expensive to operate and maintain. Rural public schools in particular have limited resources to fund costly CTE equipment, materials, and teachers. In response to these realities, the SVHEC developed the Career Tech Academy for high school students from Charlotte, Halifax, and Mecklenburg Counties.

The Career Tech Academy (CTA) is a hands-on, regional technical training center located at the SVHEC providing initial career pathways in Information Technology (IT) and Mechatronics. Through the SVHEC's partnership with Danville Community College and Southside Virginia Community College, CTA programs will be offered as dual enrollment courses. CTA instructors will teach to the community college's curriculum, and students will receive high school and college credits. In addition, industry recognized credentials, such as the internationally- recognized Siemens Level 1 Mechatronics certification, will be embedded into the coursework. Students who complete all requirements will earn a Career Studies Certificate, and have the option of using their credentials to enter the workforce, or to transfer into a community college technical program.

CTA's IT pathway will provide instruction in hardware repair, installing and configuring operating systems, security, and virtualization and will prepare students to earn the nationally recognized CompTIA A+ and Server+ certifications. Students in the Mechatronics program will receive instruction in electrical circuits and theory, electrical drawing, residential wiring, programmable logic controls (PLCs), hydraulics and pneumatics.

"Without the access provided through the CTA, rural students are likely to be deprived of access to training that leads to well-paying, in-demand information technology and advanced manufacturing jobs in the region," said SVHEC Executive Director Dr. Betty H. Adams.



TECHNICAL TRAINING CONNECTIONS

CTA is offered to high school juniors and seniors, yet SVHEC is mindful that career awareness and exploration begins much earlier. To impact K-12 students during their formative middle school years, the SVHEC joined the GO-TEC (Great Opportunities in Technology and Engineering Careers) regional collaborative. The GO-TEC initiative will provide 6th-8th grade students with hands-on exposure to in-demand career pathways. Areas of focus are precision machining; welding, advanced materials, information technology and cybersecurity; robotics, automation, and mechatronics, and advanced materials.

The GO-TEC initiative is being funded by a \$648,000 competitive grant from the Commonwealth's GO Virginia (Growth and Opportunity for Virginia) initiative. GO-TEC is a partnership between higher education institutions in Halifax, Pittsylvania, and Henry counties, and the K-12 school systems in their service areas. Higher education partners are the Southern Virginia Higher Education Center, Danville Community College, the Institute for Advanced Learning and Research, New College Institute, Patrick Henry Community College, and Southside Virginia Community College.

“GO-TEC sends a strong message to industry that Southern Virginia is serious about delivering a skilled workforce.”
—Dr. Betty H. Adams, Executive Director, SVHEC





TECHNICAL TRAINING CONNECTIONS

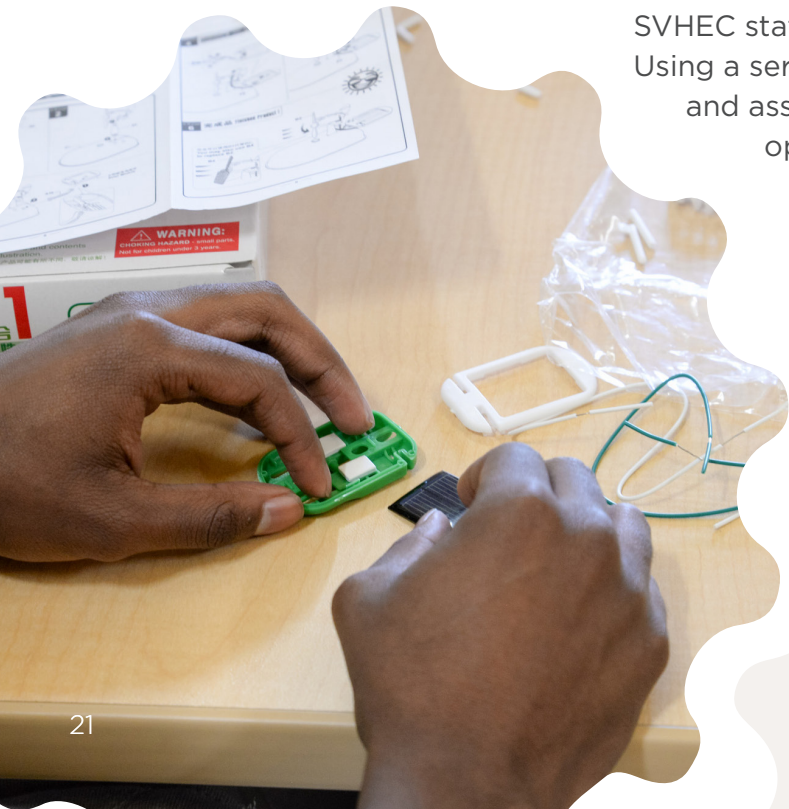
CUSTOMIZED TRAINING FOR THE RIVERMONT SCHOOL CONNECTING HIGH SCHOOL STUDENTS TO HANDS-ON CAREER EXPLORATION

When the Rivermont School in Chase City (Mecklenburg County) and Danville (Pittsylvania County) needed a training provider who could offer career pathways exploration and work within a limited timeframe, they reached out to the SVHEC. The SVHEC's customized training team listened to their needs and worked closely with school administrators to design a customized curriculum for their high school-aged students.



THE RESULT:

a 10-week “Work Ready Career Pathways” program that introduced students to careers in welding, woodworking, and mechatronics. The use of Computer Numerical Controls (CNC) was integrated into the curriculum.



SVHEC staff delivered 30 training hours of classroom and hands-on lab instruction. Using a series of projects including assembling a wire tree, using the welding simulator, and assembling a solar and electrically powered robot, students were given an opportunity to apply the knowledge they gained in the classroom in a hands-on environment.



Southern Virginia Higher Education Center was the only vendor across the state of Virginia willing to customize a technical program for our high school students with disabilities. This experience allowed them to gain authentic hands-on skills, while learning in a real work environment.

—Terry Templeton, Rivermont School CTE Coordinator



TECHNICAL TRAINING CONNECTIONS

INSTRUCTIONAL DYNAMICS FOR TECHNICAL TRAINERS CONNECTING CONTENT EXPERTS WITH CLASSROOM COMPETENCIES

In FY 2018, the SVHEC partnered with Averett University and New College Institute to connect technical trainers to a unique professional development opportunity. “Instructional Dynamics for Technical Trainers” is a 10-week, non-credit program designed to teach subject experts the classroom skills they need to be highly effective trainers and build classroom competencies for all levels. This new program was piloted at the SVHEC from April 25 to June 27, 2018. The pilot cohort was comprised of SVHEC full-time Workforce Development staff, selected part-time trainers, and several small business owners who will serve as technical training resources for future program initiatives. Three hour class sessions were held one evening per week for 10 weeks.

“Instructional Dynamics” participants received 30 instructional hours in five modules. The modules were designed to that build classroom competencies in the key areas of classroom management, learning principles and styles, using technology in the classroom/lab, assessment, and planning. The pilot program will help to standardize course materials for future programs.

“We have subject matter experts who are practitioners in the technical areas of our workforce training programs, and we want to help prepare and position them to be highly effective trainers. It is important that we pair technical expertise with exceptional classroom competencies. This program ‘Instructional Dynamics for Technical Trainers’ enables us to prepare our local and regional technical professionals to be better technical trainers. What is taught and learned in the modules will help us standardize course materials as appropriate across all of our training programs,” said Dr. Nettie Simon-Owens, SVHEC Chief Workforce Development Officer.





TECHNICAL TRAINING CONNECTIONS

AWS TESTING FACILITY ACHIEVES ACCREDITATION

CONNECTING TRAINEES, INCUMBENT WORKERS, AND EMPLOYERS WITH AN INTERNATIONALLY RECOGNIZED CERTIFICATION.

This year, the Welding@SVHEC training program achieved a significant milestone, becoming an Accredited Testing Facility (ATF) through the American Welding Society (AWS). With this internationally recognized designation, the SVHEC provides welding trainees, experienced welders, and regional employers with a connection to certification through the American Welding Society.

According to AWS.org, “ATFs play an integral part in the operation of the AWS Certified Welding program and have proven that they have the necessary resources to test welders to this nationally recognized and accepted program.”

Prior to the SVHEC earning the Accredited Testing Facility designation, Southern Virginia had only one location to certify AWS welders. The realities of rural transportation meant the distance presented a considerable barrier to many seeking AWS certification. Now welding trainees, experienced welders, and Halifax County employers have an ATF in their backyard.



AWS is the cream of the crop for welding certification. Being designated as an ATF will not only benefit SVHEC welding trainees but also employers throughout the region. We're proud to provide a needed connection to national welding certification.

—Geoffrey Vaughan, Welding@SVHEC Program Leader



DEGREE CONNECTIONS



CONNECTING STUDENTS TO IN-DEMAND CERTIFICATES AND DEGREES



“I knew I wanted a career with lots of opportunities, flexibility, and job security and that would keep me “thinking and on my feet.” I found nursing to be an excellent option.

—Miles Thomas, SVCC May 2018 RN graduate

The complete educational pathway to one of the region’s highest demand careers – nursing – is available at the SVHEC. Thanks to the SVHEC’s educational partners, students can earn entry-level certificates to four year degrees and beyond. Through the Center of Nursing Excellence, the SVHEC supports its partners by providing realistic clinical simulation settings, equipment, and experiences. Simulations provide students with an opportunity to gain experience and insight that otherwise could only be achieved on the job.





DEGREE CONNECTIONS

ER AT SVHEC SIMULATION

CONNECTING STUDENTS TO REAL-WORLD TRAINING SCENARIOS

Car crash. Sirens. Multiple patients with serious injuries. While this may sound like a typical day in a busy emergency room, it was actually the scene of a simulated training event at the SVHEC's Center of Nursing Excellence (SVHEC-CNE).

CNE Staff collaborated with Southside Virginia Community College (SVCC) health professions faculty to develop a five-hour emergency response simulation. The simulation was called "ER at SVHEC" and served as the culminating clinical practice event for the 2018 spring semester.

"ER at SVHEC" began with a mock car accident in the SVHEC parking lot. SVCC paramedic students responded to the dispatch call announcing that a child had been hit by a car. Paramedic students quickly evaluated and treated patients on the scene and then arranged transport to the "SVHEC ER". The CNE's five-bed basic skills lab was transformed into an emergency room where nurses posing as patients from the accident joined several other ER patients. SVCC Nursing students treated and managed an opioid addict, a heart attack victim, and a patient dying from respiratory related issues, all while treating the car wreck victims for their injuries. Throughout the scenario, health professions students of multiple disciplines worked as a team to continuously re-prioritize medical patient conditions as they changed.



The SVHEC provided a stimulating environment (as always) during our ER simulation scenario.

The scenario at the SVHEC gave me a taste of what a real-life disaster ER situation would possibly look like. It has given me more confidence for the future, and for that, I am grateful.

-Elyse Ward, SVCC May 2018 RN graduate



R&D CONNECTIONS



CONNECTING SOUTHERN VIRGINIA TO WORLD-CLASS RESEARCH AND DEVELOPMENT

The SVHEC's R&D Center for Advanced Manufacturing & Energy Efficiency (R&D CAMEE) connects industry, small businesses, and entrepreneurs with research and development, prototyping, proof of concept, and limited production runs to support commercialization and economic development.

Stewart Topp, owner of Topp Line Incorporated, reached out to R&D CAMEE with a sketch for a unique stapling tool that could potentially revolutionize the cabinet making industry. He dreamed of turning this bold idea into a commercialized product and a successful business.

R&D CAMEE's staff leveraged their expertise in Computer Aided Design (CAD) to engineer a dynamic, 3-D model based on Topp's initial primitive sketch. From there, staff used their advanced capabilities in integrated Computer Aided Design/Computer Aided Machining (CAD/CAM) to produce a fully functioning prototype. Stewart Topp was able to use technical information derived from the prototype to apply for a patent from the U.S. Patent Office.

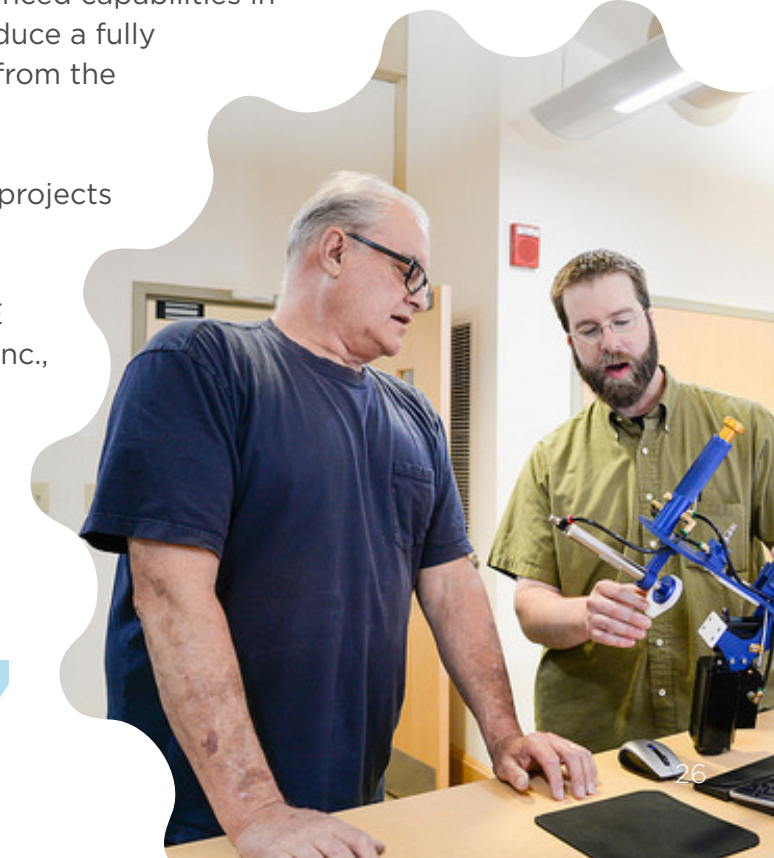
Impressed with R&D CAMEE's ability to not only "make things" but also to manage projects and mentor others in the design, engineer, prototype process, Topp has engaged R&D CAMEE to complete a limited production run of the Blind Stapler. With the product in hand, Stewart Topp is one step closer to fulfilling his dream. R&D CAMEE has completed a production run of 15 Blind Stapler Tools, which allowed Topp Line Inc., to begin an initial foray into commercialization. Initial market interest is strong, and R&D CAMEE has been contracted for a monthly production run of Blind Stapler Tools.



It's been great working with David and Kevin.

Without the R&D Center we couldn't have built this tool.

—Stewart Topp, inventor of the Blind Stapler & owner of Topp Line Inc.





R&D CONNECTIONS

Digital Rendering of the Viewing Platform



There's a meaningful push to bring CLTs to the Commonwealth. High-value wood products have been identified as an economic development opportunity for Southern Virginia, and CLTs fit within that conversation and sector perfectly. While the viewing platform is a singular project, it is part of the broader initiative of leveraging CLTs for economic development.

—David Kenealy, Special Assistant for Research & Development, SVHEC

CROSS-LAMINATED TIMBERS FOR THE CITY OF RADFORD'S NEW TRAIN-VIEWING PLATFORM

Connecting students at one of the Commonwealth's premier research universities with the resources to move an idea to reality.

When a talented group of architecture students needs a partner to bring a design to life, who do they turn to? If the project involves the production of Cross Laminated Timbers (CLTs), that partner is R&D CAMEE.

Led by Professor Kay Edge, Virginia Tech College of Architecture & Design students are working with the city of Radford to design a train-viewing platform to highlight the city's storied railroad history. While the platform will honor the past, it will be built with an eye to the future.

Made of Southern Yellow Pine CLTs, the platform will provide an attractive, sustainable observation deck along the banks of the New River. The CLTs will be produced by R&D CAMEE using a material its staff helped certify as a suitable building material.

In two phases, R&D CAMEE's staff will leverage their experience, expertise, and available resources to prep, press, and produce the CLT panels.

In a full circle moment, one day visitors to the train-viewing platform will stand on one innovation (CLTs) while observing another (the railroad).

R&D CONNECTIONS



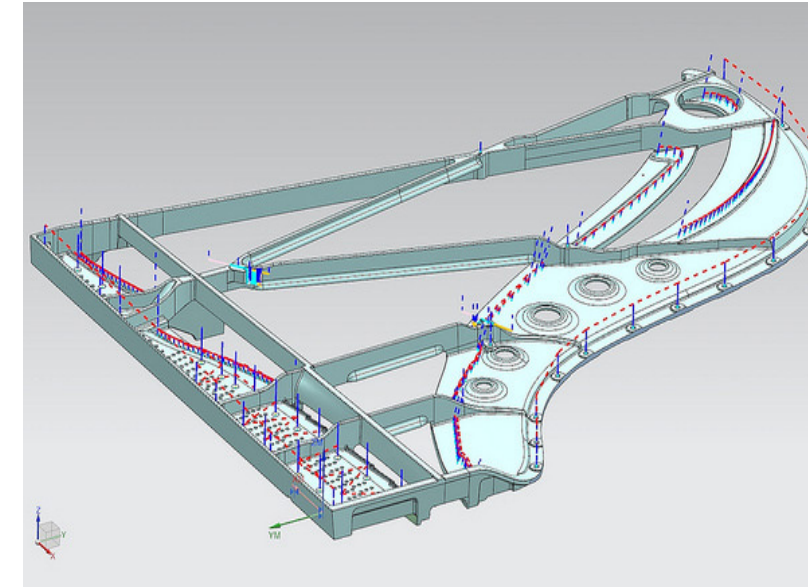
PROJECT UPDATE: STEINWAY & SONS

Connecting a world-renowned craftsman with expertise in Computer Numerical Controlled manufacturing to increase competitiveness in the world of digital manufacturing.

In FY 2017, renowned piano craftsman Steinway & Sons engaged R&D CAMEE to program its new Computer Numerical Controlled (CNC) routers to complete the post-foundry process machining on six of its grand piano frames and all its upright frames. Throughout FY 2018, R&D CAMEE staff worked closely with Steinway & Sons to design, test, and refine the required CNC programs.

R&D CAMEE's advanced abilities in Computer Aided Design/Computer Aided Machining (CAD/CAM) has allowed Steinway to:

- Increase piano production
- Increase sales
- Upgrade machinery, implement more modern manufacturing techniques, and better function within the world of digital manufacturing



The CNC programming support that we received from SVHEC and R&D CAMEE Associate Director Kevin Chrystie was of high quality and reflected a keen understanding of our machining requirements. The Steinway piano plate is a critically important element in producing world class tone - the accuracy of the machined plate and the CNC program supported by SVHEC was key to getting us to a higher quality level.

—Andy Horbachevsky, Vice President of Manufacturing, Steinway & Sons





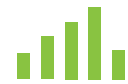
RESOURCE CONNECTIONS

CONNECTING CITIZENS TO RESOURCES THAT INCREASE EDUCATIONAL ACCESS AND IMPROVE THE GENERAL QUALITY OF LIFE



FINANCIAL ASSISTANCE CONNECTIONS

Connecting students to funding that breaks down financial barriers and makes workforce training more accessible.



In FY 2018, 63 individuals accomplished a total of 90 program completions and earned a total of 61 credentials.

“Welding is a lifelong skill—something I can always do. The NEWCGP funding definitely made it easier for me to get this training.”
—Eugene Barksdale,
Welding@SVHEC Completer



January 2018 SVHEC Mechatronics and IT Academy Program Completers and training staff.

RESOURCE CONNECTIONS



NEW CGP. TRRC. WIOA. Alphabet Soup! SVHEC staff work diligently to break down financial barriers and connect trainees with available funding sources and this assortment of letters represents thousands of dollars in financial assistance available to SVHEC Workforce Training participants. Thanks to new and expanded investments in funding credential based training, our trainees have increased access to short-term, hands-on, credential-based programs.

Department of Aging and Rehabilitative Services:

Covers up to 100% of training costs for disabled individuals who meet eligibility and enrollment criteria.

Dollar General Literacy Grant:

Provides funding through grants and donations for staff to help increase literacy and basic skills for adult learners. Tutors work with those who are seeking to enter the workforce, parents of K-12 students, and students for whom English is a Second Language (ESL).

Federal Financial Aid:

Funding through the U.S. funded Pell Grant program provides Southside Virginia Community College students with support when they co-enroll in approved SVHEC workforce training programs.

Mid-Atlantic Broadband ITA Scholarships:

Donations provided for the upstart of the IT Academy and to assist IT Academy trainees with program expenses.

New Economy Workforce Credential Grant Program:

Funding available from the Commonwealth of Virginia allowing up to two-thirds of program costs to be covered for trainees in eligible programs.

SVHEC Training Opportunity Fund:

Funding provided by several sources including grants and donations covering up to one quarter of out-of-pocket expenditures for eligible trainees.

SVHEF Scholarships:

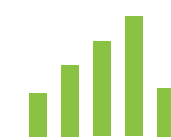
Funding provided by the Southern Virginia Higher Education Foundation. Funding amounts vary based on financial need.

Tobacco Region Revitalization Commission Funds:

Covers up to one-third of program costs for eligible trainees.

Workforce Innovation Opportunity Act:

Funding from the South Central and West Piedmont Workforce Development Boards for dislocated workers enrolling in approved training programs.



In FY 2018, 30 trainees received awards through the SVHEC Training Opportunity Fund, and 63 trainees received awards through the New Economy Workforce Credential Grant Program.



RESOURCE CONNECTIONS

CONNECTING CITIZENS TO RESOURCES THAT INCREASE EDUCATIONAL ACCESS AND IMPROVE THE GENERAL QUALITY OF LIFE



TRANSPORTATION CONNECTIONS

Connecting citizens to education, jobs, and healthcare.



There will be an estimated 14,500 passenger trips for the two new Danville to South Boston and Danville to Chatham routes

SoVA Regional Transportation Project

For the past three years, the SVHEC has been shepherding a project to develop a rural transportation solution in Southern Virginia. Led by SVHEC Executive Director Dr. Betty H. Adams, a collaboration with a regional stakeholder team of leaders in transit, business, industry, and government, conducted a transportation feasibility study in 2016. Findings: The study indicated transportation needs exist throughout Southern Virginia, and the study recommended working with an existing provider to establish routes identified as having the greatest need/demand. SVHEC and its partners have worked this year to act on study recommendations and achieved a number of significant milestones in FY 2018:

- ✓ Danville Transit approved as service provider
- ✓ Local funding approved for two new public bus routes: Danville to South Boston and Danville to Chatham
- ✓ Application approved to purchase buses
- ✓ Development of bus route underway with stops at Sentara Halifax Regional Hospital, the SVHEC, and businesses along Halifax County's Hwy 58 manufacturing hub

RESOURCE CONNECTIONS



What does all this mean? Citizens will have expanded access to education, employment, and healthcare! Thank you to the Danville City Council, Tobacco Region Revitalization Commission, and Department of Rail and Public Transportation (DRPT) for making this happen!





RESOURCE CONNECTIONS



HEALTHCARE CONNECTIONS

Connecting Southern Virginians to specialized cancer research and healthcare.

Henrietta Lacks Commission

“This project will be transformational for Halifax County, the entire Southern Virginia region, and beyond. It is significant historically, economically, and socially.” —**Matt Leonard, Executive Director, Halifax County Industrial Development Authority**

Henrietta Lacks was raised in the Clover community of Halifax County but left because of a lack of economic opportunities. In 1951, when she was just 31-years-old, Henrietta died of cervical cancer at Johns Hopkins Hospital in Baltimore, Md. Unbeknownst to her or her family, doctors at Johns Hopkins harvested Henrietta’s cells for medical research. Her cells, which thrived in the lab, multiplied millions of times over and became known as HeLa cells. These cells were sent around the world and have served as the basis for some of science’s greatest medical breakthroughs, including the development of the polio vaccine.

In FY 2018, the Virginia General Assembly established the Henrietta Lacks Commission to work towards the establishment of a biotechnology research and cancer treatment facility in Halifax County. Though Halifax County has higher incidences of certain types of cancers, its citizens lack full access to innovative cancer treatment. The Henrietta Lacks Life Sciences Center (HLLSC) will change that narrative as one day citizens may have access to cutting-edge cancer research and treatment within their community. It is anticipated that HLLSC will operate as a public-private partnership using biodata tools to provide tailored cancer treatment to Southern Virginia’s underserved populations.

The SVHEC is a partner in the Henrietta Lacks Life Sciences initiative, and has representation on the Henrietta Lacks Commission. Unanimously approved by the General Assembly, the Commission will have three years to fully develop the plan for the Henrietta Lacks Life Sciences Center, bring stakeholders on-board, find funding, and break ground. As the project progresses, the SVHEC will serve as a connector to educational resources and partners.

RESOURCE CONNECTIONS



We still have some of the same factors that drove Henrietta and her family to leave: a lack of economic opportunities especially for African-Americans and women. We still have a disparity in health and wealth, and we don’t have full opportunities for people to get cancer treatment locally. What better place to research those illnesses? What better way to honor Henrietta Lacks?

—**Matt Leonard, Executive Director, Halifax County Industrial Development Authority**



Former Governor Terry McAuliffe and former Secretary of Education (and Halifax County native), Dr. Dietra Trent, with representatives from the SVHEC, Halifax County IDA, the Lacks family, and the Henrietta Lacks Legacy Group.



RESOURCE CONNECTIONS



HOUSING CONNECTIONS

Connecting citizens to low-to-moderate income, energy-efficient housing.

Poplar Creek Housing Initiative

In 2013, R&D CAMEE partnered with the University of Virginia, the town of South Boston, the Southside Outreach Group, SIPS of America and Cardinal Homes to produce a state of the art, prefabricated, energy-efficient housing solution called the EcoMod. Utilizing advanced manufacturing principles related to the integration of CNC technology, SIPS of America and R&D CAMEE staff developed a cost-effective way to manufacture the “building envelope” of this innovative project. As a result of their collaboration, two EcoMod homes were placed on land owned by the Town of South Boston in the Poplar Creek Road community. As the occupying families go about their daily routines, the homes’ energy performance is monitored to provide valuable data on the EcoMods in particular and energy efficient home construction in general.

The success of the EcoMod project led R&D CAMEE to begin thinking about the other town-owned land in Poplar Creek where the two EcoMod test homes live and record energy efficiency data. Reaching out to the Town of South Boston, Southside Outreach Group (a Halifax County non-profit specializing in affordable housing), and Local Initiatives Support Corporation (LISC), R&D CAMEE staff soon saw an opportunity to create the intersection of partner interests and community needs for energy efficient, low-to-moderate income housing. This project is a win-win for the building partners and future residents.

The partner group is developing a plan to expand the Poplar Creek subdivision by constructing single family-owned homes and stacked duplex rentals for low-to-moderate income individuals and families. Each new low-to-moderate income dwelling will be highly energy efficient, with the goal of achieving “Passive House” status—one of the most rigorous standards for energy efficient housing in the United States.

RESOURCE CONNECTIONS



With its experience and expertise in, and passion for, energy-efficient housing, R&D CAMEE brings to the project an impressive and relevant network of valuable connections to the world of energy. Additionally, R&D CAMEE brings experience in managing complex projects and resources for workforce training.

As part of this project, R&D staff have identified a number of opportunities for workforce training for incumbent workers and new training opportunities to support job growth in the energy sector. R&D CAMEE will work with SVHEC Workforce Training staff to develop hands-on, relevant workforce training opportunities.



The Town of South Boston is proud to partner with the SVHEC on our Poplar Creek Homes Project. Along with Southside Outreach we plan to build 30+ first time home owners homes and rentals for veterans, low to moderate income families. SVHEC will help with the passive homes design, workforce training and trades education. SVHEC has provided needed leadership in moving this project forward. What a great asset we have in the SVHEC.

—Tom Raab, South Boston Town Manager



PARTNER CONNECTIONS

CONNECTING WITH THOSE WHO SHARE OUR MISSION TO ADVANCE SOUTHERN VIRGINIA’S ECONOMIC POTENTIAL.

3PK
ABB Group, South Boston
A & C Properties, Inc.
American Heart Association
AmeriStaff Employment and Staffing Solutions
Aquatic, South Boston
Averett University
Beach Mold & Tool
Charlotte County Public Schools
Comfort Systems USA
Commonwealth Graduate Engineering Program
CompTIA, Inc.
County of Halifax
Dan River Region Collaborative
Danville Community College
Danville-Pittsylvania Chamber of Commerce
Danville Transit System
Debbie’s Staffing
Department of Rehabilitative Services
Dollar General Distribution Center
Dollar General Literacy Foundation
DXC Technology/Perspecta
Dynovis (formerly Lindstand)
Eaton Corp-William Perkins
Electronic Development Laboratories, Inc. (EDL)
Essel Propack
Firebird Manufacturing, LLC
Halifax County Chamber of Commerce
Halifax County Industrial Development Authority
Halifax County Public Schools
HistoriCorps
Health Occupations of America (HOSA) Virginia Chapter
Health Resources & Services Administration (HRSA)
Huber Engineered Woods, LLC

Institute for Advanced Learning & Research
IKEA
InterTape Polymer
International Woodworking Fair-Atlanta
JP Superior Solutions
Lewis Metal Works
Longwood Small Business Development Center, Western Region
Longwood University
Longwood University’s Institute for Teaching Through Technology & Innovative Practices
Manufacturing Skills Standards Council (MSSC)
Mecklenburg County Public Schools
Microsoft Corporation
Microsoft Data Center
Mid-Atlantic Broadband Communities Corporation
Morgan Lumber Company, Inc.
National Center for Construction Education and Research (NCCER)
National Health Services Corp
New College Institute
Non Typical Outdoors
Old Dominion University
O.S. Kelly Company
Patient Transport Systems, Inc.
Piedmont Community College
Pearson Vue Assessment and Testing Center@SVHEC
Presto Products Company, South Boston
Rivermont Schools - Chase City & Danville
Sentara Halifax Regional Hospital
Shade Tree Automotive
Siemens Mechatronic Systems Certification Program
South Central Workforce Development Board
Southern Piedmont Technology Council (SPTC)
Southern Virginia Higher Education Foundation
Southern Virginia Regional Medical Center
Southside Community Services Board

Southside Health Education Foundation
Southside Outreach Group
Southside Virginia Community College
Southwest Virginia Alliance for Manufacturing Center of Excellence (SVAMCOE)
SoVAH Health-Danville
Steinway & Sons
Topp Line, Inc.
TEKSystems
The Chastain Home for Gentlewomen
The Prizery
Top Solid USA-Missler Software Inc.
Town of Halifax
Town of South Boston
Tunstall Robotics Booster Club

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 Workforce Center-South Boston
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
Yoder Industries, LLC



Contact the SVHEC Communications Office: [434-572-5446](tel: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

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