







Innovative Outreach Leads to Phenomenal Growth for Apprenticeship in South Carolina

www.apprenticeshipcarolina.com





#### **About the SC Technical College System**

The SC Technical College System continues to be South Carolina's workforce development engine. The System offers organizations – large, small and all those in between – a wide variety of programs and services designed to enhance the skill level of our state's workforce.

A technical college education is affordable, accessible and relevant for the citizens of South Carolina. It provides the fastest, most flexible path to the workforce. In two years or less, South Carolinians can earn the credentials necessary to fill high-demand, high-paying jobs.

As the state's largest higher-education sector, the System educates more of South Carolina's undergraduates than all other public colleges and universities combined. Each year, we educate and train a quarter million South Carolinians.

The System consists of three major components that work together to lead workforce development and economic development efforts in South Carolina: 1) our colleges both credit and continuing education programs; 2) our readySC™ program and 3) our Apprenticeship Carolina™ program.

## **Apprenticeship Carolina™**

In 2002, a study by the SC Chamber of Commerce found that "[a] systematic structure should be created for encouraging the development of apprenticeship training opportunities state-wide." In 2003, the Hays Report



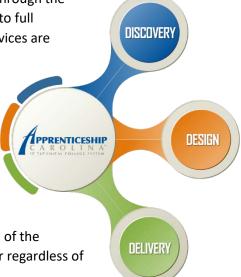
documented that "for an apprenticeship program to be a success, it cannot simply ignore... faith in the value of college." The report concluded "[f]or apprenticeships to be accepted in South Carolina, they will have to include the possibility of continued education" and that "the best central organization for promoting apprenticeship programs in the state would be the SC Technical College System."

In order to address the report's recommendations, in 2007, Apprenticeship Carolina was formed as a program of the SC Technical College System designed to ensure all employers in South Carolina have access to the

information and technical assistance they need to create demand-driven registered apprenticeship programs. Apprenticeship consultants guide companies through the registered apprenticeship development process from initial information to full recognition in the National Registered Apprenticeship System. These services are available to South Carolina employers free of charge.

Apprenticeship Carolina is headquartered in Columbia, SC. The program has consultants who cover the state by region conducting outreach to business and industry. The consultants help navigate the apprenticeship development and registration process for companies making it as free of red tape as possible. Consultants employ a unique 3D process to assist companies in creating apprenticeship programs.

Discovery: Consultants customize apprenticeship programs to meet individual employer needs. This begins with discovering the needs of the employer first. Consultants visit with each employer regardless of



industry or size to help determine the training needs of the company.

*Design:* Once the consultant understands the employer's needs, designing the program can begin. Consultants design programs to not only meet the employer's needs, but in a way that they adhere to USDOL guidelines for Registered Apprenticeship. These requirements include:

- Structured on the job training led by a mentor. The apprenticeship can be competency or time based (or a hybrid) depending on company demand. Completion of an apprenticeship program ranges between one and four years.
- Job related Education: Each year of an apprenticeship program is required to have at least 144 hours of job related education to support the program. This education can be delivered in many different ways. However, the preferred job related education provider in South Carolina is through one of the sixteen technical colleges. South Carolina apprentices benefit from the high standard of education that is delivered at the colleges. Many apprentices complete their apprenticeship with full associate's degrees.
- Scalable wage progression: Apprenticeship is an earn while you learn model of training. As a requirement, apprentices are required to receive incremental pay increases throughout their apprenticeship.

*Delivery:* Once the program has been developed, the delivery of training becomes a team approach. Companies oversee on the job training through mentors, colleges deliver high-end technical training, and Apprenticeship Carolina assists with program updates, revisions and expansions.

Once enrolled in the National Registered Apprenticeship System administered by US DOL, apprentices receive a portable and nationally recognized credential. Companies are then eligible for South Carolina's tax credit – which is \$1000 per apprentice per year for up to four years.

## Phenomenal growth

Since its establishment in 2007, Apprenticeship Carolina has helped to grow both the number of apprenticeship programs and apprentices at a phenomenal rate. Since its inception in 2007, the number of participating companies has increased eleven-fold from 90 to 965 registered companies. The number of apprentices is nearly 29,000 from a mere 777 in 2007.

Each month, the program adds approximately 120 new apprentices and registers one or more programs per week. Companies quickly see the benefits of apprenticeship as a practical workforce development tool.

28,646
apprentices

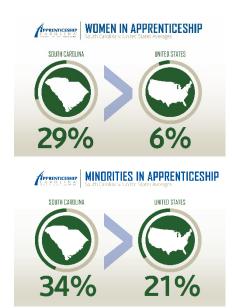
965
programs

11x
growth

Many think of traditional trades such as construction,

electrician and plumber as the ideal occupations for apprenticeship. Apprenticeship Carolina has broadened that scope to include nontraditional industry sectors like healthcare, information technology, tourism, advanced manufacturing and service industries. Because of its innovative approach and fast growth,

Apprenticeship Carolina is held as a model for the nation.



The expansion of apprenticeship outside of the traditional occupations has had a profound impact on female and minority participation in apprenticeship in South Carolina. South Carolina boasts a much higher than national average participation rate of both female and minority apprentices. Nationally there is a 6% female participation rate and a 21% minority participation rate. Whereas the participation rates in SC are 29% and 34% respectively. South Carolina can also boast proudly that 29% of registered apprentices are veterans.

Companies can build a highly-skilled workforce through on-the job training combined with job-related education allowing talented employees to realize their full potential. Apprenticeship programs provide standardized training and operational consistency that in turn ensures reliable workforce performance. Apprenticeship can also lead to improved employee retention through an overall increase in employee morale and motivation. In addition, apprenticeship has been credited with increased

productivity and quality as apprentices apply their skills and knowledge to their work. Apprenticeship programs provide bench strength for future leadership – it helps bridge that talent gap that many companies struggle with as their workforce ages through effective transfer of knowledge from seasoned employees to new workers.

One-third of participating employers offer programs in more than one occupation. Through a partnership with the University of South Carolina Moore School of Business, South Carolina has begun to better quantify the return on investment for business. Early ROI data shows that for every \$1 spent on apprenticeship training by a SC employer leads to a cumulative benefit of \$1.34 for the firm by the fourth year of the apprentice's employment. Furthermore, the net benefit for apprenticeship training was found to increase in each subsequent year, with a cumulative ROI growing from \$1.34 in year 4 to \$3.09 by year 7 of employment. South Carolina firms engaging in registered apprenticeship programs reported that the average tenure among employees who have completed a registered apprenticeship program is approximately 3.6 years longer than those who have not.

## **Youth Apprenticeship**

Low unemployment rates and complex jobs have forced South Carolina employers to think creatively about their workforce pipeline. One creative solution has been the adoption of youth Apprenticeship. Youth Apprenticeship is a forward-focused component of Apprenticeship Carolina that is growing in popularity. Designed to create crucial recruitment pipelines of young, skilled workers, this program works to decrease costly turnover and allows companies to influence, mold and shape potential future employees. High school apprentices can earn a wage while they learn as well as enhance their employability by obtaining critical work skills. Youth apprenticeship also works to strengthen students' academic skills and in turn their academic success — High school completion is a requirement of the program. Apprenticeship Carolina began focusing on growing youth apprenticeship in 2012.

At that time, there were just 5 companies across the state had a registered

youth program - today that number is more than 189.



Youth apprentices are working in industries ranging from hospitality and tourism, to healthcare to advanced manufacturing. South Carolina youth apprentices are aged 16 to 18 and are juniors or seniors in high school.

The benefit of a youth apprenticeship program for the student is two years of work experience, two years of college experience and a U.S. credential. They leave the program both career and college ready. Many youth apprentices earn as many as 27 hours towards an associate degree by the end of their apprenticeship.

# The need for continued funding

South Carolina has had phenomenal success. This is especially impressive since it is done through a very modest state budget that is significantly less than \$1 million per year for operations only. South Carolina has been very successful in finding alternative funding to support apprenticeship growth in the state. To date Apprenticeship Carolina has been awarded \$1.25 in Appalachian Regional Commission funding. Six counties in South Carolina are in the ARC region. ARC funding has benefitted nearly 60 companies and 500 apprentices. Apprenticeship Carolina has also enjoyed a close working relationship with the USDOL Office of Apprenticeship. The USDOL has allowed Apprenticeship Carolina to remain flexible and responsive to South Carolina employers. South Carolina has also been the recipient of \$7.2 million in USDOL competitive grant funds. To date these grant funds have benefitted nearly 200 South Carolina companies and 1500 apprentices. It is imperative that these funding opportunities remain in place and remain specific to the expansion of apprenticeship. It is also important that these funds allow states to be flexible in their approach to apprenticeship development. States are the breeding ground for innovation and these funds have allowed for that. South Carolina has shown that the implementation of a modest tax credit (\$1000 per apprentice up to four years) may impact employer participation in apprenticeship. The Federal Government may follow suit by promoting apprenticeship by instituting a Federal Tax credit. Not all companies have a state tax liability, but all companies have a Federal Tax

liability. Reducing the cost of apprenticeship increases the likelihood that companies will participate in apprenticeship. Instituting a tax credit incentivizes this in the way

South Carolina has proven can be successful.

#### What South Carolina Employers are saying about apprenticeship

The following case studies were taken from the SC Technical College System's economic development publication - EDGE. Electronic copies of the publication can be found at

http://www.sctechsystem.edu/edge/index.html.

SOUTH CAROLINA TAKES FLIGH Trucking: G&P Trucking Drives Apprenticeship: G&P Trucking Co., Inc. partnered with Apprenticeship Carolina and Orangeburg-Calhoun Technical College to develop South Carolina's first Logistics and Transportation Apprenticeship in 2010. Roger Griggs,

director of recruiting for G&P Trucking, described the evolution of the company's

apprenticeship program

EDGE: What kind of training partnership do you have with your local South Carolina technical college?

Roger Griggs: One of the things we find most attractive about the technical colleges over every other available truck driver training program is that the technical college programs are six to eight weeks as opposed to four weeks of training. This 180 hour-plus training has been a better fit for us, and it has enabled us to get a better-quality driver.

SOUTH CAROLIN

EDGE: How did you decide to start an apprenticeship program?

RG: We set up the training program originally with Orangeburg-Calhoun Technical College in Orangeburg, and they introduced us to the Apprenticeship Carolina program. When we first met with Apprenticeship Carolina, they actually came to our facility here and walked us through the program from beginning to end. They made it really easy to set up.

EDGE: How does the technical college training help the new apprentices?

RG: The apprenticeship program is a continuation of what the technical college provides. We only accept students in the apprenticeship program with 180 hours plus [of training]. The only place to find them is at the technical colleges. They put the platform in place, and then we springboard from that. After that, we put them with a mentor for a four-week period. They get one-on-one training in a truck, and then they receive continual training as they are assigned to a driver manager. Even though it's a 12-month apprenticeship program, there's about a four-year learning curve until a driver becomes 100 percent proficient. During that entire time, they are continually being trained.

EDGE: Has the apprenticeship program helped with driver safety?

RG: We have had just tremendous success with the students. I can tell you that [since] we've been in this program we have not had a major accident from any student that was their fault.

EDGE: Has apprenticeship helped employee retention?

RG: We have considerably better retention from new students coming into our program because of the handson training that the technical colleges provide – the 180 hours plus. I can't overemphasize how important that training is because the students are so much more prepared. Being able to come into a structured training program at G&P Trucking has afforded them the opportunity to be more successful, more qualified and more satisfied as an employee with our company.

EDGE: What are some other benefits of apprenticeship for your company?

RG: Our company has enjoyed a tremendous advantage through apprenticeship. We are not only able to find the students we need, but we also enjoy the tax credits associated with apprenticeship each year. The system and the plan are working extremely well.

The Apprenticeship Carolina program has also helped us to expand into a Veterans Affairs (VA) apprenticeship program. This program was made possible because the VA accepted the apprenticeship program developed through Apprenticeship Carolina in its entirety. That really made it so much easier for us to bring veterans onboard, and I believe we are currently the only trucking company in the state of South Carolina with both programs.

EDGE: How do you see apprenticeship helping your company grow?

RG: In today's marketplace, there is such a substantial shortage for truck drivers, and the only way that a trucking company our size can continue to fill trucks is by bringing new people into the industry. The SC Technical College System and Apprenticeship Carolina have given new life to us. They are a proven source for bringing in drivers needed to fill our trucks. This has enabled us to go ahead with plans for

growth at our company, and we will be relying heavily on resources from the SC Technical College System in the future as we move forward with our growth plans over the upcoming years.

Apprenticeship Carolina is and has been a big part of our past, present, and our future plans here at G&P Trucking. We are just tickled with the program, and we plan to expand on it. I would encourage any company, whether trucking or not, to take advantage of the resources available right here at our technical college system.



<u>Logistics: Stevens Towing Opens Gateway to Youth Apprenticeship</u>: Seaports are essential to South Carolina's growing economy, providing the gateway for interstate and international commerce. Stevens Towing Company, Inc., a midsize freight transportation company, has buoyed the region's economic trade by serving the Charleston area for more than a century.

Specializing in transport, towing and marine repair, Stevens Towing provides a fleet of tugboats, barges and cranes, and a ship for all freight and construction operations. The Stevens shipyard is located 25 miles south of Charleston, and contains two marine railways, a 150-ton marine travel lift and 500 feet of dockage for topside marine repairs. Highly trained certified welders, blaster/painters, mechanics, electricians and riggers make up the experienced team at Stevens Towing.

Recognizing the need to develop a continued source of skilled employees, Stevens Towing turned to youth apprenticeship through the SC Technical College System's Apprenticeship Carolina. Stevens established a student apprenticeship program in January 2017 at the Yonges Island shipyard. The goal of the program is to foster ties with the local community through Baptist Hill Middle/High School, and to develop a workforce pipeline through collaborative training and mentoring.

According to Benjamin Smith, vice president of operations at Stevens, "We created this program for two reasons: community connections and labor availability for welders. Our long-term business needs dictate the necessity to train welders and educate them in our facility with our work. They are more likely to stay here for the long term if they are local and their families are local."

Smith added, "Currently, we have four welders in training, and I would like to expand the program to mechanics and riggers. We have used this system for years with our tugboat operators. Thirty to 40 captains started as deckhands on our tugboats and were mentored as steersmen. The long-term employment prospects are high with an apprenticeship program in place. The retention rate is phenomenal."

Smith's vision to create a welding apprenticeship led to bringing back William Holmes, a local, experienced welder and former employee who had retired as a shipyard supervisor with Stevens after 25 years. Holmes returned to Stevens' shipyard in January 2017 to instruct the Baptist Hill students in a welding apprenticeship. He teaches the students proper techniques of SMAW "Stick" welding, GMAW "MIG" welding, grinding and oxyfuel cutting, while incorporating workplace safety and the use and care of tools and equipment.

Mathilde Dumond, welding teacher, praised Holmes' experience. "Mr. Holmes is the perfect mentor for these apprentices due to his vast knowledge, expertise and patient demeanor. They respect and admire him as an instructor, and as a member of the local community."

Holmes, himself a former graduate of Baptist Hill High School, said, "I would like to thank Stevens Towing for implementing this apprenticeship program. A big advantage of it is partnering with a lowcountry high school where trade skill education is limited."

Holmes and Dumond designed a curriculum structured with a duality of classroom instruction and hands-on practice in the shipyard based on the SC Standards for Welding Technology I and II. Dumond added other pertinent lessons, including soft skills, career development, communication skills and financial literacy. Other topics covered in the classroom include basic math and measurement, journal writing and identification of hand tools.

"The Baptist Hill apprentices earn an elective credit toward their high school diploma for this class, so we incorporate a well-rounded skill set for them as they transition to college and full-time employment," Dumond explained. "We want them to be successful in their career, and in life. The opportunities for learning are everywhere in this shipyard. Apprentices observe a myriad of activity such as a barge being repaired, a tugboat being drydocked, a hatch cover being fabricated and a ship being launched. It is an exciting place to learn and ameliorate their job skills. Additionally, every week we have a guest speaker come in to cover topics such as safety procedures, firefighting, 401Ks and investing as well as artistic welding."

Libby Singletary, human resources director, added, "All of us at Stevens Towing are so proud to be part of the company's community outreach to provide opportunities engaging local high school students in learning a skill that will enhance their lives. Learning a job skill can be transformational, it changes your life forever."

The principal of Baptist Hill Middle/High School immediately saw the benefits of youth apprenticeship. "Since we are located in a rural area with limited business and industry opportunities for our students, when we were approached by Stevens Towing to develop an apprenticeship opportunity, we knew we had to make it work," said Vanessa P. Brown, M.A.T., M.Ed. "Our partnership with Stevens Towing helps us to meet our goal of ensuring our students have access to opportunities to prepare them for college and career readiness. The students enjoy being a part of the real-world work environment while learning welding skills from the people who do it every day. Stevens provides authentic career readiness to our students."

According to Johnson Stevens, president of Stevens Towing, "Our goal is to offer the students in our community a work-based learning opportunity where they can develop a skill. Many of our employees live in this community, and this is our home. The apprenticeship program is an investment in building our community."

Several of the welders at Stevens Towing also began their trade in vocational classes in high school. Linwood Wallace, shipyard supervisor and a 37-year employee at Stevens, was introduced to welding and other trades at his Williamsburg County high school and later at Williamsburg Technical College. "We are trying to give our local people a trade and a way to make a living," Wallace said. "Our guys want to pass on their trade, and we have a retired employee to do the training."

Thomas Hillie, a welder and mentor, agreed on the importance of passing on his knowledge to the apprentices, "It is my job to teach them; my line of duty."

Hillie mentors apprentice Jason Woods, who shared, "I am shadowing Hillie and learning to weld next to him. I like it. Everyone accepts me and teaches me. I learn new skills every week, and I am learning to get comfortable in tight spaces. Welding is about being comfortable. You could be kneeling, sitting or standing. Once you get comfortable in your position, you can work better and do what you need to do."

Woods continued, "As an apprentice, you have to pay attention to what you are doing at all times. It is not just practice. You have to pay attention to your tools and your crew around you for safety. With



the apprenticeship program, you get an understanding of everything, and it pays you while you learn. You have to be a hard worker and dedicated to the job."

Susan Stevens, vice president of public relations at Stevens, summed up the positive aspects of apprenticeship perfectly, "This program benefits the students, the school, the community and our company. It's a win, win, win for everybody."

Advanced Manufacturing: South Carolina's Best Kept Secret in Advanced Manufacturing: The Schaeffler Group USA Inc. has been quietly thriving in South Carolina for over half a century.



While other companies were experiencing the negative impacts of changing times, fluctuations in the market, or downturns in the economy, Schaeffler just seemed to keep growing... and growing.

The German, family-owned company began its U.S. manufacturing operations in the small town of Cheraw in 1964. Originally known as INA Bearing (as it's still called by many in Cheraw), the company's first product was needle-roller bearings for desk drawers. Over the years, Schaeffler expanded and diversified, moving into automotive, industrial and aerospace sectors. Today, South Carolina is home to the German company's corporate headquarters in the Americas, as well as five manufacturing facilities. Schaeffler supplies bearings, engine components and other precision parts to over 70 percent of all automotive companies and 30 percent of aerospace.

Phil Homan, human resources manager at Schaeffler Group USA Inc., talks about the company's remarkable growth and how its sustained progress has been facilitated by readySC™, Apprenticeship Carolina and the SC Technical College System.

EDGE: Tell us about Schaeffler and its history here in South Carolina.

Phil Homan: Schaeffler was actually INA Bearing when it initially came to South Carolina in 1964 from Germany. It was a joint venture with another bearing company, and it was the first time the company had incorporated with another organization. Then, in 1969 we bought the whole process out, and that became our corporate headquarters here in the Americas. It started out with approximately 150 people, and today we employ almost 6,000 people all over South Carolina.

EDGE: Do you have any plans for future growth?

PH: We grow every year. It's probably the best-kept secret around.

The largest recent expansion that we did was three years ago, which was called the MultiAir and UniAir expansion. It was a joint venture with Fiat designed to build a fuel management system for its automobiles. When Chrysler bought Fiat out, we then partnered with Chrysler. That partnership represented a \$70 million investment and added 425 new jobs over a two-year period.

EDGE: How has readySC's training and recruitment program helped Schaeffler's growth?

PH: We've used readySC periodically throughout the years with pre-employment training classes. They were our partner during the MultiAir and UniAir expansion and conducted all the training for us. Most classes consisted of about 30 to 40 people a session. For one whole year, we ran four-week sessions one after the other, essentially adding more groups every four weeks.

We tailored the readySC training to our processes, which included our mechanical drawings, work orders, shop orders, products and the required soft-skills. We also worked closely with Northeastern Technical College (NETC) and their machining center. Students were asked to do simple machining work, so we could identify those with the potential to be good machinists, those that were best suited as good inspectors, and those that could do other necessary jobs. We tied it all together as a whole package.

I think over the years we've probably done 15 to 20 projects with readySC on different-sized scales. We're in the process of doing another expansion project at the first of the year. In our current plant, we're putting in a brandnew product line that will come in from Germany. We'll pick it up, move it here, and that will add 150 to 160 new jobs. That expansion is expected to be about a \$40 million project.

EDGE: How happy have you been with the long-term results of the readySC classes?

PH: The retention has been great, and turnover has been very minimal, which is good. readySC worked closely with their partners like SC Department of Employment and Workforce to advertise the positions, receive applications, pre-screen applicants, set up interviews for us and handle other logistics around recruiting. Schaeffler conducted the final screening with the applicants to identify candidates for the readySC training. It was a team effort. At the end of the pre-employment training session, I would give a presentation about the company. Some of Schaeffler's instructors also helped readySC with the classes.

A key result from this approach was that the participants were actually getting integrated into Schaeffler's system while being trained. They knew our expectations before they were ever brought on board. Those were laid out right up front in the pre-employment training. Participants understood the company's culture and expectations, their particular job requirements, and in most cases, they knew exactly what job they would be doing by the conclusion of the training. As part of the training experience, we brought them into the plant and gave them a comprehensive tour – even pointing out specific equipment and indicating, "this is the machine you are going to operate — do you feel comfortable doing that?" If they said no, we'd say, "OK, we understand." We didn't want to bring people in that didn't feel comfortable with the job.

EDGE: Is there anything specific that you'd like to highlight about the readySC training program, for instance, a trainee who has grown over the years to be highly successful at Schaeffler?

PH: We did identify four people in the last readySC training classes that really stood out. During the year following their training, they could take on more leadership in their roles because of the initiative they showed. They took charge making certain things were being done. They helped other students who were experiencing issues, and later they helped other employees who were having a problem. Going through the readySC training program helped us to quickly identify these people, and now they're moving into team leader roles.

EDGE: If you could choose a word or a phrase that best describes readySC, what would that word or phrase be?

PH: Flexible. Responsive. Helpful. Committed. Those would be the ones I would choose.

EDGE: Let's move on to apprenticeship. Schaeffler has the distinction of being the first company to start a registered apprenticeship of its kind in South Carolina.

PH: It began in 1988, when we started looking at the workforce for toolmakers and realized it was a craft that was going away. We asked ourselves, "What do we need to do to grow new toolmakers, and how do we go about that?" Unfortunately, there was no Apprenticeship Carolina in

1988, so we went to the local technical college and said, "Look, if we do something with apprenticeship, can you support it?" They said, "Yes, we can do that. We can help you out and make this work."

We went through four different iterations before we finally got it all ironed out. We worked directly with the U.S. Department of Labor (USDOL) to get it registered. They helped, and the technical college helped us get it going.

Our first group started out with seven people.

We now put in about 20 apprentices per year, and these are skilled machinists. The programs are for tool and die makers and very high-skilled setup people. This year we apprenticed a third occupation, which is electrical-mechanical and programming. As a result of this addition, we put a total of 42 apprentices into the fall semester this year.

EDGE: Do you see this as a way to deal with your aging workforce?

PH: This is the pipeline that backfills into those positions— that's how we look at it. Some companies look to apprenticeship programs for immediate results. We have a longer-term approach. I'm looking at this ten-years down the road. Everything that Schaeffler does starts with a ten-year to twenty-year plan, whether it's how we're going to manage a new product or how we are going to form a workforce. Apprenticeship is an investment in our future, and it's an investment in the community.

EDGE: What do you think is the top positive outcome of an apprenticeship program?

PH: The top positive outcome for Schaeffler is that we've got a highly-skilled, trained workforce. They totally understand the systems that we have in place, and they also represent our future leadership. We've had numerous people travel to Germany anywhere from one year to two years for additional training, and when they return, they become the next technical leader.

We have someone right now, who started out as an apprentice, went from there to be a toolmaker, and then said, "I want to learn more. I want to do more." So we moved him into a supervisory role, and he wanted to do even more. As a result, we offset his costs to go to college and earn a business degree. We've now moved him into what we call a segment leader, where he manages a business unit that represents \$80 million per year. This is clear evidence that apprenticeship can offer a definite path forward in your career.

EDGE: What has it been like starting a new apprenticeship program today versus your experience in 1988?

PH: Apprenticeship Carolina has been very helpful. When we got ready to run the new apprenticeship program in electrical-mechanical and programming, an apprenticeship consultant came out and met with us and the local technical college. They helped provide some input on curriculum that we weren't really sure about because it was a new program. They pulled all of that together, and handled the logistics around getting the program registered. We didn't have to go through the long, lengthy process that we did when we started out back in 1988. Having Apprenticeship Carolina help us through the process was very beneficial. Now Apprenticeship Carolina visits us on at least a quarterly basis and asks if there is anything more they can do to help us, or if there's anything new we need. They're flexible. They're responsive, and they're committed to what they do.

EDGE: What are some of the financial incentives that have helped your apprenticeship program over the years?

PH: We've received a tax credit (\$1000 per apprentice), and now we're tapping into the additional funding that's available through the SC Apprenticeship Initiative Grant. In addition, SC lottery tuition assistance helps to offset some of the costs. Of course, it's always nice when we get things paid for, but we don't look at it from the standpoint of what we could get back financially, at least not in the short term.

When I talk to other companies about apprenticeship, the first thing I tell them is, "This is an investment in your future." I spend approximately \$100,000 per semester with wages, benefits, tuition and other costs. However, we see this as a long-term investment in our company's future success. We've found that we have a loyal workforce that stays with us. Our workforce knows they can either move up through the supervision and management roles, or they can become that really high-skilled technical leader. They then can pass that information back down to other operators and other people. That's the real payoff for us.

EDGE: It's the gift that keeps on giving.

PH: That's right.

EDGE: You've mentioned working with your local technical college. Could you tell us a bit more about how NETC helps with the apprenticeship program?

PH: NETC provides all the instructors for our programs. We've also worked with them to revamp their machine technology program so that it is geared toward our apprenticeship program.

The college has been very responsive when we want to make changes to the curriculum. We took some things out that don't really apply anymore to industry today and added other items. For instance, we removed the old sketching and added more CAD. NETC didn't have a Pro-E (engineering design) program, so they bought it and put it into place for us. They've also been very flexible on scheduling with us.

EDGE: You've said that you often talk to other companies about their workforce needs. What do you say to a company that has a workforce need and doesn't know where to start?

PH: I first encourage them to determine their need: is it a new product that you're going to undertake, do you want to enhance your workforce, or are you looking at an aging workforce and want to bring that skill level to where it needs to be? Then we discuss the different options available. For instance, readySC is on hand for new projects and expansions. They can assist with recruiting and training. The training expense that you save there can be used for training incumbent workers who need to upgrade their skills. As far as the apprenticeship program, I tell them it's a commitment, and you have to understand that. However, it's a commitment with a great return on investment.

EDGE: What do you tell companies about the technical college?

PH: I tell them the tech college is the way to go. We're using it as an arm of our training group. They work with us closely. In fact, NETC is starting a metrology class that we need for our quality people. We've done conversational German, conversational Spanish, and they provided our CNC training. They've been very responsive to us as an industry. They provide instructors, continuing education programs and space. As we've experienced these recent increases in staff, we've lost training space and training rooms, so they've been quick to provide us with training rooms that we needed. They are wonderful partners – extremely responsive and very helpful.

EDGE: What do you see as the greatest benefit of using all three resources – readySC, Apprenticeship Carolina and the technical college – to meet your company's training needs?

PH: I think of it as a three-legged stool, and it's very important that it all works together. First, you've got readySC, which through its recruiting and training services provides you with your initial pool of people for a startup or expansion. They work very closely with the technical college to get the classrooms, materials, training and other things that you need. Then you can seamlessly segue to the apprenticeship program and the local tech college to address long-term training needs.

EDGE: Is there anything else you'd like to add about readySC, Apprenticeship Carolina or the technical colleges?

PH: I think companies really need to take a hard look at these resources. If they're looking to locate to this state, they need to talk to the right people and understand what's available for them. They need to talk to companies that have had interaction with all three programs and hear their experiences. I think that's the real selling point. Just like if you are looking to buy a certain brand of car, firsthand testimonials are the best. All the companies who use or have used these programs need to encourage others to come here to South Carolina, because our state has the recruiting and training expertise to help you get good people to work for you.

The Schaeffler Group's Apprenticeship Program in Cheraw is the oldest U.S. Department of Labor (USDOL) certified journeyman program of its type in South Carolina. Begun in 1988 as the result of a dual effort between Northeastern Technical College (NETC) and Schaeffler Group, the program focused on tool and die makers.

In 1994, the apprenticeship program broadened to include skilled setup machinists. Both programs are designed to combine education and on-the-job training for the apprentice. The two curriculums are each 7,000 hours in length and combine classical European and American apprenticeship training concepts. In 2016, Schaeffler apprenticed a third occupation — electrical-mechanical and programming.

Schaeffler hires 15 - 20 apprentices most years, but a total of 42 apprentices were added to the 2016 fall semester as a result of the newly apprenticed occupation.

Since the program's inception, over 300 apprentices have been recruited.

Graduating apprentices receive:

- 2-year Associate Degree in Machine Tool Technology from NETC
- Apprenticeship Journeyman License from USDOL

Schaeffler has a 90 percent retention rate of apprentices who graduate the program.

