

FALL/WINTER 2019



# TECH NEWS

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**SPOTLIGHT:**  
**RISING YOUNG**  
**TECHNICIANS**

**TRANSFORMING**  
**STUDENT OUTCOMES**  
**IN TRANSPORTATION**

**BY: KATIE MONTGOMERY**

**AN AUTOMOTIVE**  
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**PREPARING**  
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**NEXT ASE TEST**

# How One Instructor is Transforming Student Outcomes in Transportation

By: **Katie Montgomery**  
Manager, Marketing Content, Cengage

Industry statistics indicate that over the next 4 years, the total demand for diesel technicians will exceed 25,000 workers per year. Given that only 12,807 postsecondary diesel graduates joined the workforce from 2016 to 2017, it is evident the transportation industry is facing a major shortage of skilled workers.

We connected with Medium/Heavy Duty Truck Technology instructor, Eric Rubio, to learn how his new program at Duncan Polytechnical High School is tackling the skills gap issue head-on and gearing up students for the workforce. Read on to discover why Eric believes the program “has the opportunity to be the best heavy truck program in the country.”

**Last year, your institution launched an \$11 million-dollar program comprised of a new training facility, trucks and training aids. Tell us why the program was established.**

Some key trucking industry partners approached the district seeking to fill the skills gap and increase employability for entry-level heavy truck technicians. They identified a critical shortage of qualified technicians and proved to the district that the program would enhance the community and affect students' lives while meeting employer demand for technicians and associated industry occupations.

**How does the program work—and what makes it unique?**

I have a very strong advisory representation for my area, with members from local OEM shops, fleets and even California Highway Patrol. We meet on a regular basis to discuss curriculum, job internships and student supports. It's imperative I combine their input on what skills an entry-level technician needs with ASE Education Foundation

tasks to create a truly viable entry-level technician.

The majority of work the students do in the shop happens in groups of three. I have multiple station setups in my shop for brakes, engines, hydraulics and electrical. This allows me to have all my students immersed in the same activities and the same subject at the same time.

**What challenges have you encountered in rolling out this program? How did you overcome them?**

Parent buy-in and dispelling the myth that a student needs a college education to succeed. A lot of parents don't realize these jobs exist or how lucrative they can be. Earning parent support and expanding their view of opportunities for post-secondary endeavors are important, so I give them the chance to come see their kids in action after the first semester. Employers do a great job coming to the school, promoting their companies and telling the students that they could have a lifelong career in the heavy truck industry earning a livable wage without a college education. It helps that employers interact with parents so they can discuss the job opportunities available to their kids. Some of my students are faced with substantial challenges at home yet still give 110% effort in my class. The career technical education skills they learn can get families out of the cycle of poverty.

**How do you incorporate your real-world experience into your instruction?**

By using relevant stories and tactics for my lessons and bringing in guest speakers from the industry to talk to students and share their experience. I also model shop practices and norms in my class. Using my experience to teach students how to get acclimated to shop culture is critical to their entry-level success. One thing I do is give leadership roles to specific students every month. I have a shop supervisor who leads the class by taking attendance and identifying workwear uniform violations. Others play the roles of equipment supervisor and safety supervisor. The equipment supervisor issues tools to students, verifies proper inventories prior to use and inspects all equipment weekly, working with the safety supervisor to tag equipment in need of repairs. The safety supervisor signs off fire extinguishers and eye wash stations, identifies shop hazards and PPE violations and holds weekly safety briefings.



I've used my experience serving in the military as a technician and time spent teaching at Universal Technical Institute to try to create the most effective recipe for enhancing student comprehension and learning.

**If your students could take one thing away from your program, what would you like it to be?**

A growth mindset. Having a positive outlook and a willingness to learn is key to growing and adapting in the industry. With the rate at which technology is advancing, it's great to have this mindset.



**What do you see as the most crucial tool for preparing your students for the industry?**

Advisory board members' input on curriculum, and the internships they provide.

**Aside from being an instructor, how do you contribute to students' development?**

I believe being a mentor and holding students accountable with real-world expectations enhances their growth as future technicians. Building a relationship with a student and helping them identify the "why" in their life is critical to their development of life skills and the drive they need to succeed.

**What gives you the most satisfaction as an educator?**

Reaching that student who's lost interest in education altogether and turning them around to a learning mode in my class. I've seen their success in my class become a driving

force in their academic classes. Coming from a military background, I try to ingrain a foundation of honor and respect and put an emphasis on soft skills. The importance of a handshake, looking someone in the eye when they're talking and showing up on time are all foundational skills for keeping—and getting promoted in—jobs.

**What has been your greatest accomplishment so far?**

Holding our first heavy truck graduate night last year. This was a ceremony where all the heavy truck seniors received certificates of completion for the program. Parents and industry partners were in attendance and the night ended with a signing event for students securing full-time employment right after graduation. Emotions were high with the families because I'd been told on numerous occasions that their students had no defined path in life until they came to Duncan. Having that event was really a milestone for the students and a start to a great future.

**Has the program been successful?**

I believe the program is off to a great start. Graduating students from the class of 2019 have already found entry-level employment in local industry. I believe the senior intern program where students work in a shop once a week has played a vital role with student job placement post-graduation. That's why this program was implemented—to give the students the skills needed to fill a workforce deficit in the local heavy truck industry, while making a livable wage. Most of my students come from economically disadvantaged homes. The skills they learn can and will change their lives when they obtain jobs in the industry. I have graduates of the program from last year working full time at two OEM shops in Fresno. They can't believe they're being paid what they are for doing something they love to do.

**What are your plans and goals for the future?**

Continue to work with industry partners to make sure I'm really meeting their employment needs. This will only translate to greater success in life and work for my students.

To learn more about Eric's program at Duncan Polytechnical High School, visit [duncanpolyheavytruck.org](http://duncanpolyheavytruck.org).



## A Closer Look at How ASE Tests Are Developed.

The process for writing and validating test questions follows best practices in high-stakes, national credentialing programs. Here is how the process works:



\*\*\*Cycle starts over again after step 8 with new questions being developed.



## PREPARING FOR YOUR NEXT ASE TEST

ASE tests are designed to verify the technical knowledge of automotive service professionals, but don't worry, we have compiled these test prep resources to ensure you are ready for your next ASE certification test!

**Verifying knowledge, not theory,** ASE tests are developed to verify your understanding of technical knowledge. We apply real-world scenarios.

### Locate a Test Center

ASE offers a "Find-A-Test-Center" service, designed to help you locate one of our nearly 500 test centers close to your home or workplace. You can also check seat availability before you register and pay, plus you have 90 days to schedule, prepare, and take your tests. Visit [ASE.com/TestCenters](https://www.ase.com/TestCenters)

### Recertification

If your ASE certification has recently lapsed, don't worry, you are still eligible to take a shortened Recertification test. Remember, you can take as many recertification tests as you like with a maximum test fee.

The best place to start preparing is [ASE.com/TestPrep](https://www.ase.com/TestPrep)

- Study Guides
- Practice Tests
- Detailed "Roadmap"
- Training Resources

### Work Experience

You may take all ASE certification tests before you complete the necessary work experience. Keep in mind, L and X-series tests have prerequisites. Although you also need to have completed the work experience requirement prior to achieving ASE certification, that doesn't stop you from completing the testing requirement.

### ESL

If English is your second language, you may bring a standard, published English-to-foreign language dictionary to use during testing (some restrictions apply). Keep in mind, ASE tests feature an easy-to-use button on the interface that provides English-Spanish glossary of technical terms.

**Not a computer "nerd"? Don't worry, we've got you covered.**

ASE's testing system is extremely intuitive and easy to use.

Want to take it for a test drive? Visit [ASE.com/ASEdemo](https://www.ase.com/ASEdemo) today.



# RISING YOUNG TECHNICIANS

FOR THESE TOP GUNS THE FUTURE IS LOOKING BRIGHT

South Florida's **Jakob J. Turano** and **Chris Miller** are the new face of today's crop of up-and-coming young automotive technicians: technically savvy, computer literate, and job-ready...thanks to pro-active instructors, forward-thinking automotive programs, and industry/education programs that emphasize mentoring and hands-on apprenticeships.

Mark Armbrust, Automotive Instructor at Atlantic Technical College (ATC) and Technical High School in Coconut Creek, Fla., is proud of all of his students and points to Jakob Turano and Chris Miller in particular as two rising stars. Both have graduated from Atlantic's two-year Automotive Service Technology - ASE Education Foundation Student Career Development Program and are completing offsite corporate/manufacturer training programs. One has started working at his sponsoring Chevrolet dealership full-time and the other expects to begin "later this year at a Lexus dealership," according to Armbrust.

Turano and Miller recently took the time to share information about themselves and answer some questions from ASE.

Turano recalls, "I first became interested in auto repair when I was around 14 years old when my dad taught me how to drive a stick shift," while Miller adds he "grew up surrounded by different things related to cars such as movies and car documentaries like 'Top Gear.' Fixing cars just came as a natural passion for me."

Both agree that instructor Mark Armbrust was a driving force in turning their interest in cars into a profession. "Mr. Armbrust informed me of the career possibilities, and I thought it would be a great idea to turn my hobby into a career," says Miller. Turano cites Armbrust as a "major inspiration to pick the automotive industry as a career" and adds that "Mr. Armbrust was always there to open opportunities for me to build on my own character and to become self-sustaining with auto repair."

Both young techs note how ATC's program combined online assignments, textbook work, and "large portions" of hands-on work. "Connecting the coursework to actual hands-on experiences was very helpful," notes Miller. They also point to participation in various prestigious competitions including Skills USA and the NY Auto Dealers' sponsored National Automotive Technology Competition.

Another facet of ATC's program is its emphasis on getting students ready for ASE testing, the industry standard, and both students threw themselves into the effort with gusto. Turano's competitive spirit motivated him to take and pass 10 ASE tests including the Advanced Engine Performance Specialist Test (L1), becoming the first student to reach this milestone. Miller was equally motivated but his focus was more down-to-earth: he wants to qualify for GM World Class Technician status, so passing the appropriate ASE exams is a prerequisite, and he has done so, passing the required tests for ASE Master Technician status.

These students' enthusiasm and dedication are impossible to ignore and their excitement about their futures is palpable. But they are mature beyond their years, musing about the bigger things such as the traits any technician needs in order to thrive.

"The most important things any technician should have are common sense, motivation, and integrity...The consequences of mistakes are serious, so you have to make sure you are paying attention and applying your knowledge on every repair. A good tech is motivated to get the job done right the first time, for the benefit of himself, and the customer. Finally, integrity is a requirement for all techs. It's vital for techs to do the right thing and be honest," notes Turano.

Miller, ever practical, observes, "The ideal technician should be able to handle pressure because time is money in the automotive industry. The ideal technician is also a person with excellent communication skills, both written and verbal, and has a strong willingness to learn. I also believe that a technician needs to have the ability to collaborate with others and accept change."

Both young guns were effusive in the praise of their instructors at all levels of their journey: high school, technical college, and manufacturer programs: GM-ASEP and Toyota T-TEN. And no doubt, these promising students picked up important life-lessons beyond technical know-how from their dedicated teachers along the way.

## An Instructor's Elevator Speech to Parents of Students Considering Automotive Careers

*"I simply share my story with them. I come from a family of college educated people that were expecting me to choose a traditional college education. Working on cars was a tough thing for my mom to swallow. I attended GM-ASEP and graduated top of my class and became a team leader at the largest Chevy dealer in the USA within five years. My income allowed me to move out of their house when I turned 21 and the rest is history. I then share with them what 50 new car dealers within 50 miles of each other means for their children wishing to enter our industry. The demand for quality technicians has never been higher and the service departments are seeing between 100-300 cars a day in south Florida. Our local technical colleges offer corporate training programs for most of them too. The cost is less the \$12,000, with a 100% employment rate. That's tough to beat!"*

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### MARK ARMBRUST

Instructor

Atlantic Technical College and  
Technical High School

Coconut Creek, Fla.



# WHY WE EMPLOY ASE CERTIFIED TECHNICIANS

- ✓ ASE certification is an independent third-party confirmation that our technicians possess the knowledge of the necessary skills and best practices to be successful at their job.
- ✓ ASE certification confirms that our technicians are constantly keeping up with the technology on your vehicle.
- ✓ ASE verifies that our technicians are capable of reasoning through complex problems.
- ✓ ASE certification brings consistency to the level of service at our shop.
- ✓ Voluntary ASE certification demonstrates that our shop takes the extra steps to ensure quality service, setting us apart from our competitors.



# TESTING FEAR FACTOR

Fear is a distressing human emotion that can prevent us from achieving our goals. Maybe you haven't "stepped up to the plate" to take an ASE test because of fear. As a result, your fear may be holding you back from the rewards that certification brings.

**Your fear could be based on myths and misunderstandings.**

It's time to face your fears and get past them!

**Here are some solutions that may help you leap over the hurdle of fear and achieve your goal of ASE certification.**



## OBSTACLE

### WHAT IF I'M NOT A GOOD "TEST TAKER"?

## OPPORTUNITY

ASE tests focus on knowledge of the skills required to do a certain task, not on theory. This makes ASE tests relevant to what's done on the job, not in some laboratory. ASE's Test Taking Tips provides an interactive look at the different types of ASE questions: [www.ase.com/testingtips](http://www.ase.com/testingtips)

## OBSTACLE

### WILL I HAVE ENOUGH TIME TO COMPLETE THE TEST?

## OPPORTUNITY

ASE lists the number of questions and allowed times for each of its tests in the Study Guides. To learn how to use the computer testing interface, including time-saving tips, review the YouTube video, "A Look at the ASE Testing Platform" at <https://www.youtube.com/watch?v=utfNePc5kOA>

## OBSTACLE

### ENGLISH IS MY SECOND LANGUAGE!

## OPPORTUNITY

If **English is your second language**, you may bring a standard, published English-to-foreign language dictionary to use during testing. **If you speak Spanish**, every ASE test features a button on the testing interface that launches an English-Spanish Glossary of Technical Terms.

## OBSTACLE

### MY CERTIFICATION HAS LAPSED.

## OPPORTUNITY

Regardless of how long it's been since your certifications expired, you're eligible to **take the recertification versions** of those tests. Recertification tests usually have about half the number of questions as the regular tests, so this can ease the burden of recouping the certification status you seek.

## OBSTACLE

### ARE THERE ANY TEST SITES NEAR ME?

## OPPORTUNITY

Relax. ASE offers its tests at nearly 500 secure, proctored centers across the country and has a wide availability of times for testing appointments. **You can search for a test center and testing appointment** before you register and pay for tests by going here: [www.ase.com/findaseat](http://www.ase.com/findaseat)

## OBSTACLE

### I'M NOT SURE ABOUT COMPUTER BASED TESTING.

## OPPORTUNITY

You don't have to be a computer nerd to take an ASE Computer-Based Test (CBT). In fact, you don't even need to know how to use a PC's operating system. To see how easy it is to take a test, take a test drive of the system at <https://www.youtube.com/watch?v=utfNePc5kOA>

## OBSTACLE

### I LACK THE NECESSARY WORK EXPERIENCE.

## OPPORTUNITY

You may take all certification tests without having yet earned the necessary experience, but keep in mind, L and X-series tests have prerequisites.

## OBSTACLE

### I'M AFRAID I'M JUST NOT PREPARED!

## OPPORTUNITY

The best place to start is with a free **ASE Study Guide** at: [www.ase.com/studyguides](http://www.ase.com/studyguides). The guides contain a detailed "roadmap" for each test, along with sample questions and information on training resources. Also be sure to check out the **Official ASE Practice Test**: [www.ase.com/practice](http://www.ase.com/practice)



# REGISTRATION SCHEDULE

## Fall Registration

October 10 - December 31

## Winter Registration

January 10 - March 31

## Spring Registration

April 10 - June 30

## Summer Registration

July 10 - September 30



Are you certified? **ASE Certification** verifies your technical knowledge in the automotive service industry.

Wear your credentials {and pride} on your sleeve.

## IMPORTANT ONLINE RESOURCES

**ASE Test Registration Info**  
[ASE.com/Register](https://www.ase.com/Register)

**Training Resources**  
[ASE.com/AccreditedTraining](https://www.ase.com/AccreditedTraining)

**ASE Webinars**  
[YouTube.com/ASEcampus](https://www.youtube.com/ASEcampus)

**Test Prep, Study Guides, Practice Tests, Testing Tips and Demos**  
[ASE.com/TestPrep](https://www.ase.com/TestPrep)

**myASE "How-To" Demos**  
[ASE.com/myASEdemos](https://www.ase.com/myASEdemos)

**ASE Consumer Webpage**  
[ASE.com/Drivers](https://www.ase.com/Drivers)

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