MODEL SUMMARY
Automotive Youth Educational Systems (AYES) prepares high school students for full-time, entry-level automotive technician or parts specialist roles or for a postsecondary program through which they can further advance their technical education. Participants complete 320 hours of on-the-job training as interns, participate in SkillsUSA* and can earn an industry-recognized student certification.

BACKGROUND
In 1995, former CEO of General Motors (GM) Jack Smith announced the development of a GM initiative to improve the quality and quantity of technical education within the United States. At that time, automotive service dealers were short handed and needed technicians with the right skills, knowledge and attitude to troubleshoot and perform automobile maintenance. The credibility of the automotive industry rested on having knowledgeable technicians available to meet customers’ demands for service of their automobiles. Within two years, 14 automotive manufacturers, representing an impressive 95 percent of all cars sold in the nation, joined GM to create the AYES initiative. In 2009, AYES joined the Institute for Automotive Service Excellence (ASE) Industry Education Alliance, along with the National Automotive Technicians Education Foundation (NATEF) and the Automotive Training Managers Council. This initiative provides automotive partners like Mercedes-Benz of Arlington (located in Arlington, VA) with career-ready, entry-level automotive technicians and service personnel.

PARTNERSHIP
AYES is a partnership among automotive vehicle, parts, tool and equipment manufacturers; dealers and trade associations; state departments of education and labor; more than 350 secondary schools; 600 instructors; and independent after-market service providers.

NUTS AND BOLTS
The AYES initiative is designed for junior and senior high school students with strong academic performance and an interest in pursuing a career in automotive service. To qualify for the program, students must be enrolled in a NATEF-accredited automotive program; demonstrate a disciplined attendance record; and have parent, teacher and counselor endorsement.

*SkillsUSA is a nonprofit association that serves more than 300,000 high school, college and postsecondary students — and their instructors — annually in trade, technical and skilled service instructional programs. SkillsUSA programs teach leadership, citizenship and character development to complement technical skill training and emphasize respect for the dignity of work, ethics, workmanship, scholarship and safety. SkillsUSA has served 11.9 million annual members since its founding in 1965.
Key elements of the model include:

- **Education**: Participants learn safety training and the basic math, science and communication skills necessary for an entry-level technician position.

- **Career Training**: Educational institutions provide the tools and training for AYES participants to compile a professional portfolio and be successful in a job interview.

- **Job Shadowing**: Students shadow experienced workers in the service lane, parts department and service department at participating automotive centers.

- **Interview Day**: Students interview with service shop representatives during a formal Interview Day event and provide feedback to ensure the best fit.

- **Paid Summer Internship**: AYES participants complete a 320-hour paid summer internship, working side by side with their mentor, a master automotive technician. Interns perform disassembly of parts and diagnostics and can complete rotations in the customer service and collision centers.

- **SkillsUSA**: Students participate in SkillsUSA, which allows them to strengthen employability skills (dependability, attitude, teamwork and communication).

- **On-the-Job Training**: During their senior year, AYES participants may continue to hone their skills by working after school at their internship host site.

- **ASE Student Certification**: Students obtain the industry-recognized ASE Student Certification after passing the exam.

AYES graduates are prepared for a full-time, entry-level automotive technician or parts specialist role or for a postsecondary program to further advance their technical education.

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“AYES provides us with a dedicated and passionate pipeline of automotive technicians. They want to do a good job and are interested in continually learning and improving their skills.”
— Stan Rodia, Service and Parts Director, Mercedes-Benz of Arlington

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**PROGRAM BENEFITS, RESULTS AND OUTCOMES**

The AYES initiative elevates both the business and the community while creating a pipeline of young, talented automotive service individuals. AYES provides industry partners dedicated, interested students who want to learn how to become the best automotive technicians and parts specialists. Their passion and dedication motivate and elevate the professionalism of the entire staff. By participating in AYES, industry partners have priority access to the technicians of tomorrow. Much of Mercedes-Benz of Arlington’s demand for entry-level technicians is met through the AYES initiative. The initiative has also met the need for filling entry-level service advisor, parts advisor and technician positions within Mercedes-Benz customer service, parts and collision centers. Nationwide, 3,500 employers participate in AYES to mentor and train their future workforce.

For the student, training and education do not end at AYES graduation. Many companies sponsor AYES graduates to continue their education, including through postsecondary education and automotive manufacturing programs and degrees, such as the BMW STEP, Chrysler CAP, GM-ASEAP, Honda PACT, Mercedes-Benz Elite or the Toyota T-TEN programs. Mercedes-Benz of Arlington has sponsored graduates to complete automotive degrees at Northern Virginia Community College and the Mercedes-Benz Elite program.

Mentor Marvin Wentzel with former AYES student Jonathan King. Jonathan furthered his automotive training through Universal Technical Institute as well as the Mercedes-Benz Elite Training program. Jonathan is now a Mercedes-Benz Certified Technician.
SUSTAINABILITY AND OVERCOMING IMPLEMENTATION CHALLENGES

Currently, there are AYES-affiliated programs in 45 states with 700 participating schools. This national program continues to provide the skills and training needed to close the entry-level automotive technician skills gap.

Depending on the jurisdiction, the biggest roadblock to implementing the AYES initiative is addressing automotive shop insurance coverage for participating interns, as they are typically under 18 years of age. AYES can provide automotive business partners with letters from insurance companies that can alleviate this concern. It is strongly recommended that businesses interested in creating similar programs check the laws and regulations in their local jurisdiction regarding insurance coverage and liabilities.

WORDS OF WISDOM

An employer creating a similar program must build strong relationships with local educational institutions and instructors. The instructors must understand the employer’s business and its current technologies. For Mercedes-Benz of Arlington, the success of the AYES initiative is largely a result of its education partner — in this case the Arlington Career Center — as well as ASE Master Certified instructors and their commitment to building the future pipeline of automotive technicians and service personnel.

Felege Zewedé, who is replacing the drive belt for the alternator and power steering system, started as a 2010 AYES summer intern with Mercedes-Benz of Arlington. After graduating high school, he joined the team full time and is a Mercedes-Benz Certified Technician.

INFORMATION, TOOLS AND RESOURCES

• Arlington Career Center AYES
  www.apsva.us/Page/8677
• AYES www.ayes.org
• SkillsUSA http://skillsusa.org/about

CONTACT

Automotive Youth Educational Systems
Phone: 703-669-6677
Email: info@ayes.org
Descriptions of Common Work-and-Learn Models

A Glossary of Key Terms

Following are descriptions of the most common and effective work-and-learn models that are a part of business and industry programs nationwide.

**Apprenticeship**
An apprenticeship is a unique, flexible training system that combines job-related technical instruction with structured on-the-job learning experiences. It provides a unique combination of structured learning with on-the-job training from an assigned mentor. Related instruction, technical training or other certified training is provided by apprenticeship training centers, technical schools, community colleges, and/or institutions employing distance and computer-based learning approaches. The goal is to provide workers with advanced skill sets that meet the specific needs of employers. In many cases, these programs provide apprentices the opportunity to simultaneously obtain secondary and postsecondary degrees, as well as credentials issued by third-party industry organizations. (Source: U.S. Department of Labor)

**Clinical Training/Practicum**
Clinical training combines classroom learning with supervised hands-on immersion experiences in specific fields, mostly in industries that involve human services. In health fields, clinical training is founded on actual observation and lab instruction and/or treatment of patients, as distinguished from theoretical or experimental training. The training is usually highly specialized and includes coursework specific to performing functions and tasks in an actual workplace. (Sources: Siemens Clinical Training & Continuing Education; Clinical Training Institute)

**Cooperative Education/Co-Op**
Cooperative education is the integration of classroom theory with practical work experience, through which students alternate attendance at school with periods of professional employment. At the high school level, the periods of classroom and work-based experience are usually half-days. In higher education, the alternation is most often on a longer time scale. Cooperative education programs enable students to apply technical skills already acquired through the education institution in a real-world workplace setting. Traditionally, cooperative education has been used to aid a student’s transition from school to work, while providing participating employers an opportunity to attract, evaluate, train and ultimately employ a ready source of educated and skilled employees. (Sources: Center for Manufacturing Excellence, University of Mississippi; University of Cincinnati)

**Career Fair, Career Expo, Job Fair**
A career fair, also called a career expo or job fair, is an event held for employers and recruiters to meet with potential job candidates. Industry representatives set up exhibition booths — usually at a secondary or postsecondary institution — where students and job seekers can find information about different career fields, training opportunities and jobs currently available. Career fairs give employers an opportunity to interact with future job candidates and make direct contact with students who are making decisions about what education, training and career to pursue. Quality career fairs offer hands-on activities to participants, allowing them to see firsthand what a job in the industry entails.
**Externship**
An externship is typically a training program offered by educational institutions and private businesses that gives students brief practical experiences in their field of study and insight and knowledge in a particular career field. Often shorter term than internships, externships are intensive career learning experiences that typically range from two days to two weeks. Although more immersive and structured than job shadowing, these experiences provide the opportunity for students to see firsthand the work activities and responsibilities in various professions and industries. The experience should provide the learner a greater sense of the knowledge, skills and attributes of people who thrive within that given career pathway and industry sector and a complete experience of day-to-day work life.

**Hands-On Training**
Hands-on training provides student learners an opportunity to use their hands to perform tasks. This training aims to simulate conditions that are as close as possible to real work conditions while avoiding the risks commonly associated with a new employee. In hands-on training, participants typically have the opportunity for repeated practice.

**Industry Tour**
Companies offer guided tours of their facilities to let students, parents and the general public witness firsthand the day-to-day operations of the business. Typically lasting up to two hours, tours are led by knowledgeable staff members who show and describe the companies’ processes, products and protocols, as well as point out the skills and training needed for different jobs. Quality industry tours typically result in greater awareness of the company and the industry and increased engagement with the local community, schools and future employees.

**Internship**
An internship is a formal program that provides practical experience for learners in an occupation or profession, during which the learner is immersed in a work situation for a limited period of time. Internships can be paid or unpaid and usually accompany or relate to academic coursework or training. A quality internship provides the learner an increasingly thorough grasp of the career field, extensive experience in specific job functions, application of education and training to specific duties, and a feel for what it is like to work on a daily basis in the industry. While not always intended to result in employment at the sponsoring company, internships help employers expose potential workers to their workplace and industry and recruit, screen and test-fit future job candidates before they are hired full time.

**Job Shadowing**
Job shadowing is a work experience option through which students learn about a job by walking through the working day as a shadow to a competent worker. The job shadowing work experience is a temporary, unpaid exposure to the workplace in an occupational area of interest to the student. Students witness firsthand the work environment, employability and occupational skills in practice, the value of professional training, and potential career options. Job shadowing is designed to increase career awareness, help model student behavior through examples, and reinforce for the student the link between classroom learning and work requirements. Almost any workplace is a potential job-shadowing site. (Source: Paris, K., and Mason, S. (1995). Planning and Implementing Youth Apprenticeship and Work-Based Learning. Madison, WI: University of Wisconsin, Center on Education and Work)

**Mentorship**
Mentorship is the coupling of a novice with an older, more experienced professional wherein the expert shares knowledge and experience with the novice over the course of time. Mentorship can be either formal or informal and can happen face to face; online; or in conjunction with other work-and-learn opportunities, such as internships and job shadowing. Mentorships help mentored youth improve their overall academic achievement and develop the necessary skills to enter or continue on a career path. They also provide guidance for decision making. Quality mentorships usually involve mentee training and alignment to the company’s culture and goals.
On-the-Job Training (OJT)

OJT is training by an employer that is provided to a paid participant (either an incoming or incumbent employee) while engaged in productive work in a job that provides knowledge or skills essential to the adequate performance of the job. OJT is usually limited in duration, as appropriate to the occupation for which the participant is being trained, taking into account the content of the training, the prior work experience of the participant and the service strategy of the participant, as appropriate. (Source: Workforce Investment Act)

Pre-Apprenticeship

Pre-apprenticeship is defined by the Employment and Training Administration as “a program or set of strategies [that is] designed to prepare individuals to enter and succeed in a Registered Apprenticeship program and has a documented partnership with at least one, if not more, Registered Apprenticeship program(s).” Since the pre-apprenticeship model is meant to prepare learners to enter a registered apprenticeship, a quality model provides sufficient applied academic training, as well as industry-based technical skills training and practice, to ensure that students transition successfully into an apprenticeship.

Registered Apprenticeship

A registered apprenticeship encompasses the details and benefits listed in the “Apprenticeship” definition. Additionally, it meets national apprenticeship standards outlined by the registration process with the U.S. Department of Labor (DOL) Office of Apprenticeship or through a state apprenticeship agency. Upon completion of a registered apprenticeship program, participants receive a portable credential (provided by DOL or the state apprenticeship agency) that certifies occupational proficiency as a journey worker for the selected occupation. For more information on the DOL registered apprenticeship program, please visit: www.dol.gov/apprenticeship. (Source: U.S. Department of Labor)

Returnship

A returnship is an internship specifically designed for older professionals who have been out of the workforce for an extended period of time to re-enter a career. In many cases, they are designed to help these individuals refresh their skill sets and learn new technologies before returning as full-time employees. Often lasting around 10 weeks, a returnship provides individuals with an opportunity to sharpen their skills in a given career path or pursue new areas of expertise in a work environment that may have changed significantly since their last experience as an employee. Returnships also give employers the opportunity to screen returning experienced applicants before hiring them full time. (Sources: Goldman Sachs; CareerBuilder)

RESOURCES

- 21st Century Competency-Based Apprenticeship Resources
  http://bit.ly/1RcO4Uh

- Georgetown University Center on Education and the Workforce: Learning While Earning: The New Normal
  http://bit.ly/1XJMXzw

- National Network of Business and Industry Associations: Common Employability Skills
  http://bit.ly/1KCBUUP

- National Network of Business and Industry Associations: Grads of Life ROI Calculator
  http://bit.ly/1X6yKMP

  http://bit.ly/1NesrCd

- Change the Equation: Work-Based Learning: An Employer’s Guide
  http://bit.ly/1jDn6du

- U.S. Department of Labor Office of Apprenticeship
  www.dol.gov/apprenticeship
Contributors
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[Logos of various contributing companies]