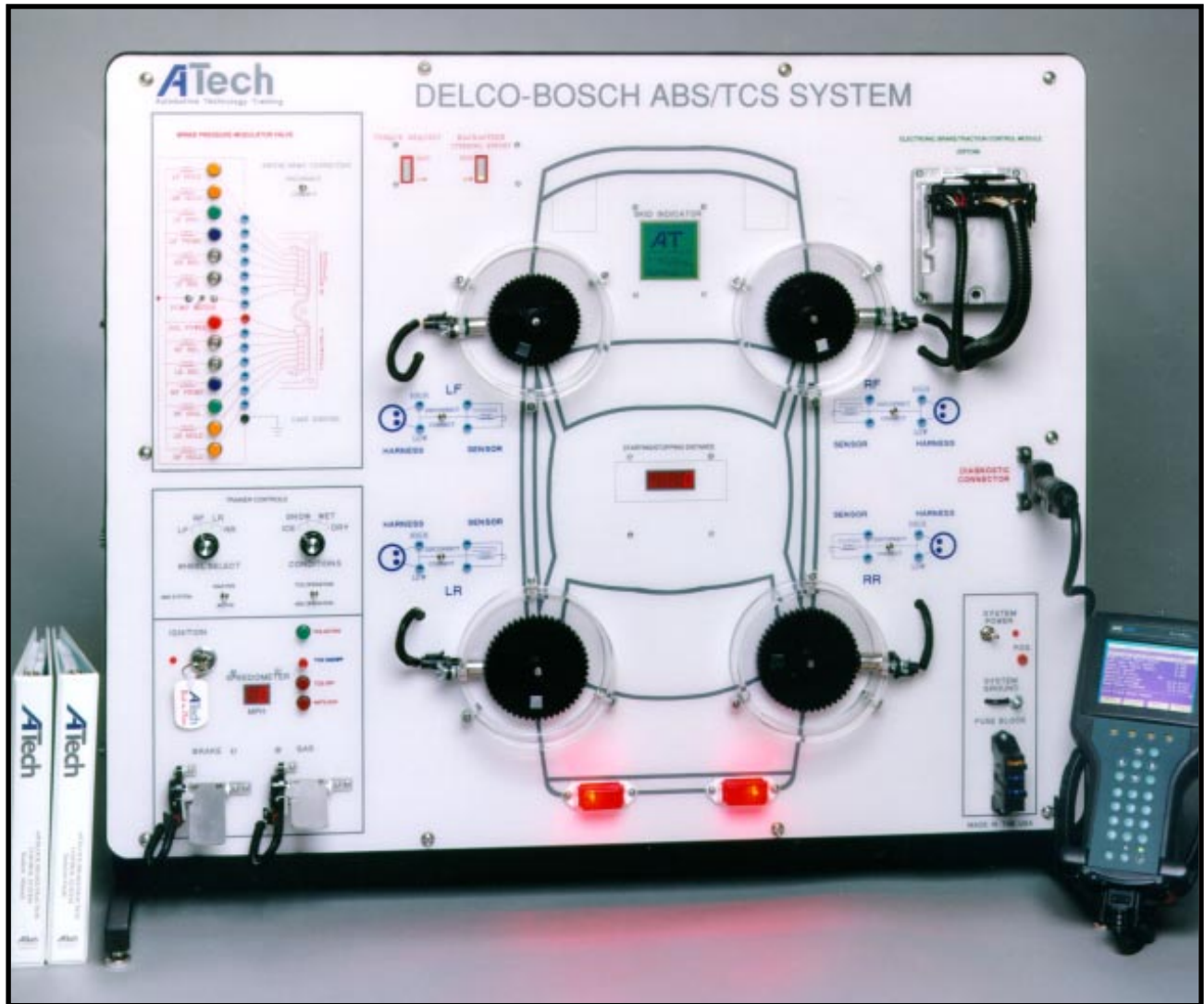


# AutoTeacher News

News and How-to Articles for Automotive Teachers  
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## Antilock Brakes/Traction Control Demonstrator

ATech's ABS/TCS Training System is based on the Delco-Bosch Controller. The trainer allows selectable operation of either the Antilock Brake system or the Traction Control system. Students can "drive" the vehicle with either system inoperable and attempt to control the vehicle. Their performance is evaluated against the system's performance through the distance readout. For example in Antilock operation, the student can accelerate the vehicle to any reference speed and apply full brake. The Antilock system will stop the vehicle as quickly as possible with minimum wheel slippage. The distance required to stop the vehicle is indicated on the stopping distance display. The student can then disable the ABS operation and accelerate the vehicle

to the same reference speed as before. This time the student will apply the brakes to stop the vehicle as quickly as possible. If overbraking occurs, the vehicle will start to skid off the road as shown on the LCD display. By comparing the stopping distances recorded, the student's braking performance can be evaluated against the ABS system. A similar evaluation can be made for the TCS system by comparing acceleration distances. This student "competition" against the ABS / TCS controller can be performed for selectable road conditions - Ice, Snow, Wet, and Dry and what ever vehicle speed values desired. Scan tools can be used to graph wheel speeds during start/stop sequences. A complete curriculum package is available including student and instructor manuals.

## Detroit Schools Choose ATech Equipment



Training of future technicians in the Detroit, Michigan area has taken a giant leap forward. Breithaupt and Golightly Career and Technical Centers have set up training labs and classrooms with the ATech training systems. The training facilities are similar to ones used by General Motors, Ford Motor, DaimlerChrysler AG, Honda, Nissan, Mitsubishi, and Toyota.



ABS/TCS, and OBDII trainers

The labs are financed by Detroit Public Schools, as well as more than 30 automotive manufacturers and dealerships who donate vehicles, parts, and equipment. As part of agreements Breithaupt has with Henry Ford Community College and Wayne County Community College District, students can also earn college credit.



Electrical Trainers in bay area

This is a tough, two-year program said Jerome Crawford, an automotive electrical instructor at the Breithaupt school. Students who complete it with at least a C average earn auto repair certificates from the State -- good for jobs with starting salaries

of at least \$50,000.



Diesel and A/C trainers



Engine Control Troubleshooting

### Fourth Grade Students Learn Electricity with ATech 1800

Lauree Scott a fourth grade teacher at Hillcrest elementary school in Gillette Wyoming and I were talking one day. She was telling me about doing an electrical unit in her science class but didn't have very good equipment, always not working. I told her about my ATech trainers and asked if she would like to bring her students to my Automotive Diagnostics class at the high school. I would let my students teach her class about electricity using the trainers so the kids could get some hands on experience. It was a great learning experience for both her students and mine. Thanks to ATech, the 4th graders were able to see things happening and my students learned more because of teaching. Thanks ATech for having great equipment.

Rex Hayhurst  
Campbell County High School, Wyoming

## U.S. Takes Silver Medal in World Automotive Service Competition



Joshua Boschee from North Dakota State College of Science in Wahpeton, N.D. represented the USA in the 36th World Skills Competition held in Seoul, South Korea. He competed in the Automotive Service area and won second place. He is the first American to win a Silver Medal in Automotive Service Technology. He also was awarded a Gold Medal for Best in Nation with the highest score on the American team.

The U.S. has been involved in this international competition since 1973, when President Richard Nixon recognized SkillsUSA (then known as VICA) as the official organization to represent the USA. The team candidates are selected from among the top scorers at the SkillsUSA Championships held annually in Kansas City, Missouri. Once they are selected, the students are sponsored and coached by private industry. Six other team members competed in autobody repair, CNC turning, welding, refrigeration, cabinet making and ladies hairdressing.

One additional note, this competition took place during the time America was attacked. How these young people maintained their composure and managed to perform at world-class level is amazing. They all deserve our congratulations.

## 100% NATEF/ASE Task Coverage

It is not unusual today to hear that another State has told their Automotive Technology programs at both secondary and post - secondary level to “get NATEF certified or else”. Everyone knows what the “or - else” means. Program certification also means that the instructor needs to be ASE certified in the area he/she teaches. So, what do you do?

Obviously, certification of the instructor or the program is not going to occur over night. But you will have to show your administration that you are at least making progress if you hope to avoid the “or-else”.

Let’s look at ASE certification first. If you are not certified in any areas, you should pick A6 - Electrical / Electronic Systems to try. It is the easiest to prepare for and, some say, the easiest test of all the areas. Scour the internet for sample tests, practice questions, etc. ATech has a random test question generator on its website, [www.atechtraining.com](http://www.atechtraining.com), for practice purposes and ASE, [www.asecert.org](http://www.asecert.org), has sample questions on their website. Study guides are also available from many different sources.

You can attack program certification in primarily two ways. One is to take your present curriculum and try to fit all of the NATEF tasks into it. In other words, locate the section of your present program that deals with a particular task and make a table showing the relationship. Do that for all of the almost five hundred tasks. Another way is to find a curriculum package already developed that has 100% NATEF task coverage, catalogued and indexed.

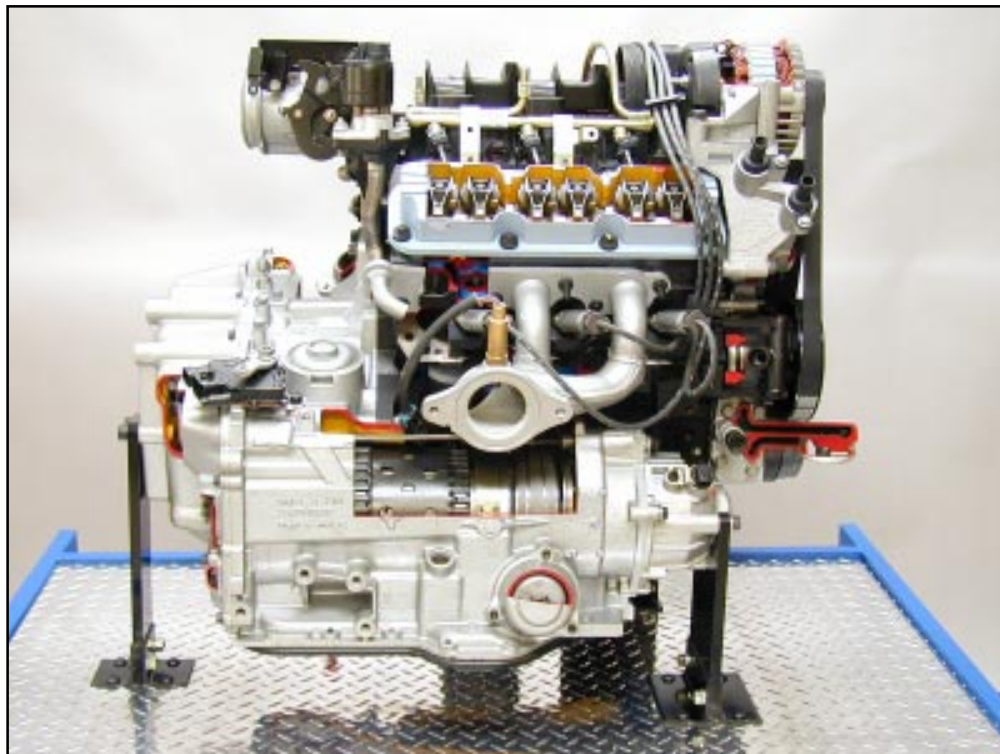
The Instructional Materials Laboratory (IML) of the University of Missouri - Columbia has, for some time, produced an Automotive Technology curriculum package that covers 100% of the NATEF/ASE tasks. This is where you start. The entire program on CDROM costs less than a \$1000 or buy only a part of it to start with. ATech has these materials for sale. Take a proposal back to your administration and explain the need. Point out that some State education departments have purchased multiple copies.

As your program develops, you can improve efficiency, safety and student performance by including the ATech training systems referenced by the curriculum. Recently, ATech Training Inc. and the IML have signed a collaborative effort agreement to enhance the IML curriculum package by incorporating the various ATech training systems. Visit the ATech website [www.atechtraining.com](http://www.atechtraining.com) to view the curriculum and the supporting training systems.



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