

ELECTRONIC AGE

In 2000, on-board electronics became indispensable to trucks for meeting Euro III emission levels. Compared to the HGV technicians of 20 years ago, today's apprentices have a better understanding of electronics and how to share information, Kevin Swallow discovers

Achieving a consensus on the substance and delivery of training for the next generation of truck technicians is difficult, because the job has become more complex.

Before 2000, a dealership would have a team of mechanics that worked hand in hand with an auto electrician. Mechanics tinkered with the gearbox, axle or clutch, while the electrician would be called upon to troubleshoot the alternator or starter motor and rewire the back lights.

Since then, service and maintenance have changed in the truck industry. "As legislation for better emission standards becomes more challenging, we have bolted on technology to meet it," explains Tony Shepherd, business services manager at DAF Trucks, which takes on 120 apprentices each year.

"The move from Euro III to Euro IV saw a quantum leap in technology and electronics, with the introduction of exhaust gas recirculation (EGR) and selective catalytic reduction (SCR). The move to Euro VI has seen another huge step. It's been an evolution. Older, established technicians have adapted and embraced it," he adds.



Understanding the mechanical elements remains the central focus, states the business services manager. But with electronics, the issue is to understand the measurements. States Shepherd: "We do practical things in the classroom and get apprentices to build their own circuit boards. Having an electrical-based apprenticeship would miss the point; we need to turn out rounded skilled people ready for the next step. We run an evening club designed to introduce diagnostics to apprentices specifically for DAF products."

Developing the diagnostics ability is a crucial skill, says John Parry, who is trustee and director of the Institute of Road Transport Engineers (IRTE), and who also works on the steering group of irtec, the independent technician accreditation. "Through the apprenticeship you have a generic diagnostics system, so the apprentice has to show the methodology and ability to recognise that they can

detect the fault," Parry adds.

Today, around 60% of an apprenticeship course is based on electronics, which is a positive selling point when trying to attract teenagers who might not have previously considered the HGV technician's role, according to Parry.

ENTRY REQUIREMENTS

It's best to assess school-leavers individually and on merit, says Volvo Group's commercial academy and apprenticeship manager Adam Plastow. The company uses Stephenson College in Leicestershire to train its 300 apprentices, as well as 100 apprentices at its subsidiary Renault Trucks.

Rather than impose a minimum qualification for applicants, Volvo Group prefers not to discourage anyone from applying. Plastow explains: "Volvo Group took the responsibility, through the training provider Stephenson College, to look

at functional skills over any GCSE grade. Where an applicant hasn't achieved what they should have achieved, we will help them. We take on board the academic, practical and functional skills, and make a call on an individual.

"Around 40% of apprentices go through maths or English or both via City and Guilds to Level 2, equivalent to a C in GCSE; they must achieve that to progress," he says.

Plastow is currently working with schools in the Derbyshire area, where local employers are telling schools that many leavers are not 'work ready'.

He points the finger at the English Baccalaureate (EBacc) school performance measure, in which practical subjects like metalwork and woodwork often get dropped because they don't contribute towards the mark.

"What's more, the traditional weekend jobs - I spent every Saturday cleaning cars at a dealership to get work experience - don't exist anymore," he laments.

A dealership taking on apprentices can rely too much on academic qualifications that overlook an applicant's practical skills, argues Jim Millar, a training consultant and apprentice assessor at Bristol-based S&B Automotive Academy, covering Scotland and northern England.

He points out: "More recruiters are putting forward practical tests to get an idea of how good someone is who might lack the right qualifications; things like jigsaw or practical mathematics challenges.

"After 11 years of education, they might have the practical and software knowhow, but not the functional skills," Millar says.

As a greater amount of a vehicle's repair and maintenance schedule is governed by the computer now, it's important that the incoming generation is able to understand electronics and



"Volvo Group took the responsibility, through the training provider Stephenson College, to look at functional skills over any GCSE grade"

Adam Plastow

translate the data, he adds. "Heavy work is still involved, but electronics has raised the standard of training and upskilled the industry. Younger people are more comfortable with electronics."

The significance of functional skills is recognised by the structure of the apprenticeship programme. Millar points out that progressing from Level 2, where the apprentice replaces components, to Level 3, where the focus is diagnosis and explaining why, is quite a step up.

One young ex-apprentice who agrees with those sentiments is James Edwards. He started out at Mercedes-Benz dealer group Rygor in 2000 before taking on the group technical manager role in 2013. (Rygor recently welcomed 15 new apprentices, increasing its total number of trainees to 29.) According to Edwards, today's apprentices are fully conversant with PCs and they quickly come to understand the systems.

"Communication is important," Edwards contends. "The workshop needs to relay the right information in layman's terms to the people in administration so customers know what work has been done and what they're being charged for.

"The same applies to warranty servicing: the right information and damage code has to be entered so it can be properly claimed for and not rejected. Rygor has a quality control point to make sure it's right."

For another dealer, the strength of its apprentices is that they communicate and help each other. So says Mike Spark, the founder and boss of Renault Trucks dealership Sparks Commercial Services. The dealership has seven apprentices across three sites who work as a team. He adds: "The ones in the third year are confident and clear when talking to customers and drivers; it is part of the learning curve." **TE**