



Training for tomorrow

When times get tough, tough cuts follow, with training and continuing professional development suffering, too. But will that wreak long-term irreparable damage? Brian Wall reports

When times get tough, the answer is to take a sharp knife to training and hack it back to the bone, right? Now there's a suggestion guaranteed to result in cries of horror among plant engineers, as they contemplate all they hold dear, in terms of investing in people, threatened. "Slash training and CPD [continuing professional development]," one plant engineer told me, "and you risk destroying the most precious asset any business has – its people."

Yet the reality is that training does indeed suffer in a downturn. Why? Mainly because it's an easy target: managers can readily measure the immediate benefits of budget cuts, while overlooking the immeasurables, such as the cost to plant efficiency and business competitiveness.

And beware management promises of 'We'll take a look at it again when things pick up'. Too often, it's too little, too late – and the counter argument is that tough economic times demand even better trained people, as those that escape the axe take on additional responsibilities. Unless engineers and technicians are supported by structured CPD, the

likelihood is that any economies will be short lived.

So who is making CPD work today, and how? MCP, which provides operator and technician training for major plant clients, is involved with the National Skills Academy for Food and Drink Manufacturing, and has been working with training and engineering professionals from organisations throughout that sector. Cadbury, Britvic, PepsiCo, Thorntons, United Biscuits, Glanbia, Mars and Coca-Cola have all been sharing their experiences across training for maintenance and engineering.

Skills and competitiveness

MCP managing director Peter Gagg says this has resulted in a skills and behaviour model, aimed at supporting moves to increase plant efficiency and competitiveness. And it's not just applicable to food and drink: organisations in the pharmaceutical sector have also looked at these issues and believe MCP's approach could be useful for other manufacturing sectors, including their own.

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plant can be repaired and back up running quickly," comments Gagg. "Investment in training, particularly when a plant runs 24 hours a day, is vital to minimise downtime. Upskilling the workforce also empowers them, which can only be of benefit – with technicians, engineers and operators taking ownership to ensure that plant assets achieve expected levels of safety, quality and availability."

From many years' experience, MCP has refined two main approaches to establishing a plant's training requirements: namely, a training needs analysis and a competence-based approach. TNA provides a broad brush route to establishing what operators and technicians get involved in. "The competence-based approach is narrower, but one output from it is evidence of competence. At least managers can be sure that [operatives] are safe, following successful completion of the competencies," says Gagg.

"Some senior operators and maintenance technicians take umbrage from having their skills assessed," he warns. "So a combination of approaches might be appropriate." Either way, robust training and development plans, he insists, lead to: improved morale, motivation and job satisfaction; improved performance; better role definition; legislative compliance; reduced reliance on external contractors; and retained staff.

There is another point: working in technical environments, continually reshaped by changing technologies and legislation, makes plant engineers particularly susceptible to falling behind. Structured CPD helps identify skills gaps and guides the path to making up the difference.

And the same applies beyond technology, as Chris Williams, technical training development manager at plant hire firm Speedy, points out. "CPD can help plug the gaps left by a technical education, such as the soft skills required to transition to a managerial position," he says. "In this sense, CPD covers anything that helps develop your CV, in terms of technical competencies, new qualifications or professional experience."

For him, what matters beyond the CPD structure

and training itself is keeping a log of CPD progression. "If you've been to a seminar recently on any topic relating to your job, then make a record of it. If you've been through a two-hour training session with a manufacturing engineer about new machinery, keep a record of it. For your efforts to be recognised, you must share your CPD log with a manager or, if appropriate, HR team."

Naturally, what counts as CPD, and what doesn't, depends on the role and future goals. "Engineering institutions generally provide an outline of the types of topic they would like to see as part of CPD," explains Williams. "Broadly, they cover learning specialist knowledge, and developing practical skills, personal responsibility, leadership, communication and interpersonal skills, as well as demonstrating an obligation to safety, the profession and the environment."

Where technical competencies and qualifications are concerned, however, it is the employer's responsibility to ensure that staff are being given adequate support, with CPD underpinning that effort. "Organisations that take this seriously are also likely to boost their chances of attracting and retaining the best talent," comments Williams.

Power to CPD

Health and safety professionals are keen practitioners of CPD and the UK is a global leader in the field – which is no coincidence. "Professions that align themselves to the rigours of CPD become more effective and competitive," comments Williams. And he warns that, as CPD becomes more widely recognised and adopted, engineers need to integrate it into their everyday lives, or accept the threat to their employability.

Much the same applies to engineering organisations themselves. Demonstrating compliance with standards and specifications is increasingly key to winning and keeping contracts. It's all about proving operatives' abilities to apply the necessary practical and theoretical knowledge for the task. As ISO 9001:2008 6.2.2 states: 'The organisation shall determine the necessary competence for personnel performing work affecting conformity to product requirements.'

Welding, for instance, is identified as a 'special process', which means that its quality cannot readily be verified. Hence, specialist management, personnel and procedures are required – and hence also TWI's emphasis on CPD. As Chris Eady, associate director, professional affairs and certification at TWI, puts it: "EngTechs, IEngs and chartered engineers, registered through The Welding Institute, make a commitment to lifelong learning, and record their CPD activities as evidence. Through the CSWIP personnel certification schemes, TWI Certification [also] provides competence assurance for specific plant engineering roles, including welding



inspection, plant inspection, welding quality control coordination, and both topside and subsea inspection for offshore plant and structures.”

Having worked in the petrochemical industry for many years, Roy Rowlands, refinery inspection and welding engineer for Shell UK Oil Products, can vouch for the process. “As a registered CSWIP senior welding inspector, I fulfil my commitment to CPD by attending Welding and Joining Society branch meetings, developing in-house training for our plant and welding inspection engineers, contributing to committees on compliance and standards, and attending seminars on welding processes and consumables.”

Rowlands reminds us that there are many ways to demonstrate CPD and adds that he always encourages engineers and technicians to make use of TWI resources. “This gives me the confidence that they have the necessary up-to-date knowledge to keep our plant, equipment, tankage and pipelines running safely and effectively,” he explains.

That’s a theme echoed by Paul Jordinson, welding and materials services manager at AMEC Consulting and Engineering. “Plant engineers are vital to the safe and efficient running of complex equipment. It is essential that our engineers have a



broad technical knowledge, coupled with training in health and safety, process design, materials, welding and quality assurance,” he comments.

A final word from MCP’s Gagg. “When first speaking to management, we often get asked: ‘But doesn’t training mean the day job gets affected?’ MCP has statistics showing that, even when 100-plus engineers spend a month, over a period of time, on training, efficiency levels and service levels are still maintained. So the answer to the question is ‘yes’ – the day job is affected ... for the better.” **PE**

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