

Inspection of AWE PLC

Inspection dates: 5 to 8 July 2022

Overall effectiveness	Good
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The quality of education	Good
Behaviour and attitudes	Outstanding
Personal development	Outstanding
Leadership and management	Good
Apprenticeships	Good
Overall effectiveness at previous inspection	Not previously inspected

Information about this provider

The Atomic Weapons Establishment (AWE) was established in 1952 to manage and maintain Britain's nuclear deterrent. In July 2021, AWE PLC became an arm's length non-departmental public body wholly owned by the Ministry of Defence, working in close collaboration with the Defence Nuclear Organisation. AWE currently employs circa 6,457 staff at its two locations in Berkshire.

At the time of this inspection, there were 162 apprentices. Of the current cohort of apprentices approximately two thirds were aged 16 to 18 when they commenced their apprenticeship. The majority are working towards a level 3 standards-based apprenticeship with 86 apprentices working towards the science industrial maintenance technician, 36 working towards manufacturing engineering, 18 working towards engineering technician and 11 working towards the level 4 advanced manufacturing engineering apprenticeship. AWE works with two subcontractors.

What is it like to be a learner with this provider?

Apprentices make rapid progress, producing high-quality work often above the required standards or expectations at that point in their training. Their written work is well researched, referenced and presented professionally. They swiftly develop knowledge and skills, which enable them to become more effective in the workplace.

Apprentices participate fully in AWE's social responsibility agenda. They represent AWE positively in the community participating in activities which support AWE's charity '3-A's'. They lead on regular outreach programmes, such as a science, technology, engineering and mathematics (STEM) challenge for female students in local schools, to promote STEM apprenticeships as a career option. As a result, apprentices develop wider skills, such as management, communication and team work that support them well in the workplace.

Apprentices enjoy learning, strive to complete work to a high standard and take pride in their work. Apprentices carefully demonstrate the machining skills they have learned, enabling them to accurately use equipment, such as a small tooling device. They describe the process used for making precision cuts at right angles, drilling holes, and creating flat surfaces. Control and instrumentation apprentices develop skills that enable them to identify and select electronic components to construct an electronic circuit board and then use test equipment to check functionality.

Apprentices have a comprehensive understanding of safe working and consistently apply this in practice. Apprentices use appropriate personal protective equipment where required. They effectively apply their training in the essential use of 'dosimetry' to measure their exposure to radiation in order that they comply with AWE expectations and legal requirements.

Apprentices value the frequent open discussions they have with trainers and their peers, on how to stay safe in all aspects of life. Apprentices reflect on how they discuss case studies, such as recent attacks on lone females. As a result, they are more aware of others and plan carefully when travelling.

What does the provider do well and what does it need to do better?

Leaders have a clear and purposeful rationale for the apprenticeships they offer, which is to provide high-quality training to increase the size of the workforce to meet future staffing requirements. This enables them to meet challenging targets in the development and deployment of new technologies as part of their contribution to national security.

Leaders and managers work very effectively with key stakeholders on initiatives, such as learning and skills improvement plans, to understand the need for nuclear specific skills, such as nuclear engineers and wide-ranging skills, such as ordnance, munitions and explosives technicians. Leaders use this information very well to develop an ambitious vision for the apprenticeships they offer. As a result,

apprentices participate in impactful learning, which leads to employed positions for most apprentices.

Leaders have put in place significant investments to obtain up-to-date training resources and to secure new technologies, such as virtual reality headsets. Apprentices have access to up-to-date machinery, such as hybrid manual computer numerical control machines. Employers value the high levels of competence and confidence apprentices develop, which enable them to become independent in their allocated job roles.

Leaders ensure trainers and assessors have appropriate qualifications and relevant vocational experience. Work based assessors and trainers hold the recognised science and technical assessor qualification, which enables them to skilfully assess apprentices' competence. They undertake regular training, such as psychological first aid and online learning delivery, that equips them with the knowledge and skills they need to support apprentices well in all aspects of their apprenticeship. Trainers complete industrial specific training, such as certification in the Institution of Wiring and Technology wiring regulations.

Trainers carefully plan the curriculum to ensure that apprentices develop the necessary skills required for their job roles. They ensure apprentices are prepared well to successfully tackle new challenges and apply their training with confidence and resilience in the workplace. For example, engineering apprentices conduct non-destructive assay testing as part of material verification. They carefully describe the purpose of the testing to ensure the material meets the specification of the engineer's design and is compliant with regulatory body standards.

Leaders use initial assessment effectively to identify apprentices additional support needs, such as dyslexia, dyscalculia and attention deficit hyperactivity disorder. Managers refer apprentices to specialists for further assessments and diagnostics. Managers put in place recommended support strategies, which they carefully monitor and adapt throughout the apprenticeship. For example, managers bought a digital calliper enabling an apprentice struggling to read analogue numbers to take accurate measurements and complete tasks. Apprentices value the support they receive, and report interventions have had a positive impact on all aspects of their lives, making them more confident and ambitious.

Work based assessors, trainers and mentors ensure apprentices, including those with special educational needs and/or disabilities, develop substantial new knowledge, skills and behaviours rapidly. Staff embed core skills early in the apprenticeship, such as soldering and splicing. Mentors model correct ways of working. As a result, most apprentices develop mastery and can work independently with high levels of confidence and competence.

Trainers, assessors and mentors use assessment very effectively and systematically to check apprentices' understanding of key concepts. They provide valuable feedback, which helps apprentices improve the quality of their work. Assessors and mentors ensure apprentices are well prepared for end-point assessment.

Apprentices aspire to achieve the highest grades. For example, laboratory technician apprentices value the mock interviews and additional support they receive and feel very well prepared to successfully complete their apprenticeship.

Leaders and trainers ensure apprentices benefit from an exceptional broader curriculum, which promotes personal development and supports them to succeed in their work placements. For example, laboratory technician apprentices completed computer aided design training, which enabled them to create an effective cool box. Apprentices also complete accredited Institution of Occupational Safety and Health qualifications, resuscitation training and obtain Construction Skills Certification Scheme cards.

Apprentices receive good guidance from their trainers, assessors and mentors regarding their next steps. They understand the need to consolidate their experience in the workplace on completion of their apprenticeship to gain promotion. As a result, apprentices make good progress from their apprenticeship into supervisory positions. However, apprentices do not have access to impartial careers guidance, which limits their awareness of broader opportunities.

Senior leaders responsible for apprenticeships provide scrutiny and challenge of leaders and managers. However, this is overly focused on operational activity with insufficient oversight of the quality of education. Leaders do not have sufficient focus on the key strengths and weaknesses of the provision. Therefore, they are not able to implement effectively actions that support continuous improvements in teaching and assessment.

Leaders and managers do not plan sufficiently effective off-the-job training to ensure all apprentices build upon their prior knowledge and qualifications. Consequently these apprentices do not make the rapid progress they are capable of. For example, scientific maintenance technician apprentices receive poorly planned and inappropriate off-the-job training. As a result, these apprentices are unable to effectively apply their learning in the workplace.

Safeguarding

The arrangements for safeguarding are effective.

The designated safeguarding lead is suitably trained and ensures incident logs record safeguarding concerns thoroughly.

Leaders have established a range of effective procedures to assure the health, welfare and safety of apprentices. Managers carry out appropriate recruitment checks to assure the suitability of staff who work directly with apprentices. Apprentices benefit from extensive support, including access to mentoring, counselling, and mental health and welfare assistance, and they have a secure understanding of how to access this help.

Staff provide apprentices with clear guidance on the importance of adhering to AWE site-specific safety practices. Leaders promote the AWE community 'Culture of Care', where apprentices benefit from a positive and inclusive environment. Apprentices feel safe and have an appropriate level of understanding about matters, such as harassment, bullying and sexism.

What does the provider need to do to improve?

- Staff should ensure apprentices understand the wide range of career progression opportunities available to them at the end of their programme, so they can plan their long-term career pathway.
- Leaders should revisit their quality assurance, so that it allows them to make more accurate judgements about the quality of education and better informs staff development plans.
- Leaders and managers must ensure they plan appropriate off-the-job training to ensure all apprentices develop new knowledge, skills and behaviours rapidly and can apply these successfully to the workplace.

Provider details

Unique reference number	50578
Address	Building C9.1 Aldermaston Berks RG7 4PR
Contact number	07917828511
Website	www.awe.co.uk/
Principal/CEO	Alison Atkinson
Provider type	Employer provider
Date of previous inspection	28 March 2008
Main subcontractors	Basingstoke College of Technology Activate Learning

Information about this inspection

The inspection team was assisted by the Skills Academy Manager, as nominee. Inspectors took account of the provider's most recent self-assessment report and development plans, and the previous inspection report. The inspection was carried out using the [further education and skills inspection handbook](#) and took into account all relevant provision at the provider. Inspectors collected a wide range of evidence to inform judgements including visiting learning sessions, scrutinising learners' work, seeking the views of learners, staff and other stakeholders, and examining the provider's documentation and records.

Inspection team

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