

Atomic Weapons Establishment plc

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Contents

Background information	3
Inspection judgements	3
Scope of the inspection.....	3
Description of the provider.....	4
Summary of grades awarded	5
Overall judgement.....	6
Effectiveness of provision	6
Capacity to improve	7
Key strengths	7
Key areas for improvement.....	7
Main findings	8
Achievement and standards	8
Quality of provision.....	8
Leadership and management	10
Equality of opportunity	10
What learners like	12
What learners think could improve.....	12
Learners' achievements	13

Background information

Inspection judgements

Inspectors use a four-point scale to summarise their judgements about achievement and standards, the quality of provision, and leadership and management, which includes a grade for equality of opportunity.

Key for inspection grades

Grade 1	Outstanding
Grade 2	Good
Grade 3	Satisfactory
Grade 4	Inadequate

Further information can be found on how inspection judgements are made on www.ofsted.gov.uk.

Scope of the inspection

In deciding the scope of the inspection, inspectors take account of the provider's most recent self-assessment report and development plans, and comments from the local Learning and Skills Council (LSC) or other funding body. Where appropriate, inspectors also consider the previous inspection report (www.ofsted.gov.uk), reports from the inspectorates' quality monitoring or annual assessment visits, and data on learners and their achievements over the period since the previous inspection.

In addition to reporting on overall effectiveness of the organisation, its capacity to improve further, achievement and standards, quality of provision and leadership and management, this inspection focused on specialist provision in:

- Engineering and manufacturing technologies

Description of the provider

1. The primary role of the Atomic Weapons Establishment (AWE) is to manage and maintain Britain's nuclear deterrent. Some 4500 people are directly employed, together with approximately 2000 subcontractors, many of whom are currently employed in extensive construction work at Aldermaston.
2. AWE's in-house training has been in place for 55 years. Some 400 ex-apprentices are employed within the company. The on-site Apprentice Academy (the Academy) has 21 staff including a training manager and 10 instructor/trainers. AWE is contracted by Thames Valley LSC to deliver apprenticeships and advanced apprenticeships. AWE does, however, fund apprentices to gain further qualifications in addition to the apprenticeships, for example higher national certificates. At the time of the inspection there were 82 apprentices and 66 advanced apprentices. All are employed by AWE.
3. Given the nature of AWE's work, training takes place in a highly secured environment. It is AWE policy that only holders of a British passport can be employed on site. The technical certificate element of the apprenticeship framework is provided off site, predominately by Newbury College.
4. Data from the Office for National Statistics shows that in 2006 the resident population of West Berkshire was approximately 148,800 of whom 73,800 were male. Over 95% were classified as white British. Unemployment in the area is relatively low. In January 2008 less than 1% of the resident population were claiming job seekers allowance, compared with over 2% nationally.

Summary of grades awarded

Effectiveness of provision	Outstanding: Grade 1
Capacity to improve	Good: Grade 2
Achievement and standards	Outstanding: Grade 1
Quality of provision	Outstanding: Grade 1
Leadership and management	Outstanding: Grade 1
Equality of opportunity	Contributory grade: Good: Grade 2

Sector subject area

Engineering and manufacturing technologies	Outstanding: Grade 1
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Overall judgement

Effectiveness of provision

Outstanding: Grade 1

5. Achievements and standards are outstanding. Overall advanced apprentice framework success rates are consistently high. Timely success rates have significantly improved since the previous inspection. The standard of learner's work is very high. Many learners make very good progress. Retention is particularly high. Attendance is good.
6. The quality of provision is outstanding. Teaching and learning are good and very good in many cases. Very high standards are set for learners. Learners receive good individual support. Resources to support training are outstanding. Accommodation in the Academy is spacious and very well equipped. Equipment is particularly well maintained. Assessment in the Academy is good. Workplace, assessment is satisfactory. Assessment monitoring is insufficiently thorough in some cases.
7. Support for the additional learning is excellent. The development of learners' literacy and numeracy skills is good. The Academy works well to remove learners' barriers to progress. The apprentice programmes are particularly closely matched to the needs of AWE. Information, advice and guidance are good. Learners experience an excellent range of enrichment activities.
8. Support for learners is outstanding. Tutors provide detailed individual support. Highly skilled and supportive mentors support learners in on site training. Learners have access to AWE's comprehensive range of employee benefits and services.
9. Leadership and management are outstanding. Strategic leadership and commitment to training is strong. Significant resources beyond those provided by the LSC are made available. Target-setting and review is very thorough. Very good use is made of data. Management of health and safety is excellent. The adequacy and suitability of staff is particularly good, supported by well funded professional development.
10. Thorough and productive links are in place with the local colleges. Quality improvement arrangements are good. Self-assessment is appropriately inclusive. Clearly presented data is well used to inform judgements. The latest self-assessment report is largely accurate.
11. Management of equality of opportunity and diversity is good. Robust arrangements are in place to eliminate bullying and harassment. Staff and learners awareness of equality and diversity matters is satisfactory. The Academy works hard, but with insufficient success to attract learners from under-represented groups. Access to learning for those with limited mobility is good in the refurbished areas of the Academy. Procedures for safeguarding learners meet current government requirements

Capacity to improve

Good: Grade 2

12. AWE's capacity to improve is good. All grades have improved since the previous inspection. Identified strengths have been maintained and, in some cases, improved. Good progress has been made in tackling areas for improvement identified at the previous inspection. Sound progress has been made in resolving other areas for improvement identified in AWE's annual self-assessment reports. Overall success rates are consistently high for advanced apprentices, but are variable for apprentices.
13. Self-assessment is well planned and appropriately inclusive. Data is well used to inform judgements. Improvement planning is thorough and well monitored. The latest self-assessment report is largely accurate, but did not identify a few areas for improvement relating to workplace assessment. Equality and diversity aspects of the provision were insufficiently considered in the self-assessment report.

Key strengths

- High overall success rates
- Very high standard of learners work
- Outstanding resources to support learning
- Excellent range of additionality and enrichment
- Outstanding support for learners
- Outstanding leadership and management
- Excellent health and safety arrangements
- Thorough and productive links with colleges in developing and monitoring the provision
- Good management of equality of opportunity

Key areas for improvement

- No key areas for improvement were identified

Main findings

Achievement and standards

Outstanding: Grade 1

14. Achievements and standards are outstanding, as identified in the self-assessment report. Overall advanced apprentice framework success rates are consistently high. From 2005 to 2007 the advanced apprenticeship success rate averaged 87% compared with the national average of 51%. The apprenticeship overall success rate fell in 2005/06, but recovered to 78% in 2006/07, compared with a national average of 61%. Provisional data from the LSC indicates that high overall success rates are being maintained.
15. Timely success rates have significantly improved since the previous inspection. In 2006/07 the advanced apprenticeship timely success rate was 65%. Provisional LSC data for 2007/08 shows a rate of 80%. The apprentice timely success rates for the same period are 48% and 89% respectively.
16. The standard of learners' work is very high. Learners gain particularly good workplace skills and produce work of particularly good quality. Learners develop excellent practical skills and demonstrate high levels of confidence in using tools and specialist equipment when carrying out their work. Many learners make very good progress and undertake a wide range of challenging extension projects to enhance and extend their skill development. Retention is very high at over 90% for the last five years. Attendance is good and some learners voluntarily attend additional skills development sessions.

Quality of provision

Outstanding: Grade 1

17. The quality of provision is outstanding. Teaching and learning at the Academy is good and very good in many cases. Tutors are enthusiastic about their subjects and convey this enthusiasm to apprentices. Very high standards are set for learners. Particularly effective techniques are used to ensure that learners are actively engaged and learning in both practical and theory sessions. These sessions are well staffed and learners receive good individual support.
18. Resources to support training are outstanding. Excellent use is made of information learning technology, data projectors and interactive learner response systems. Training classrooms and workshops in the Academy are spacious, well designed and equipped with extensive training resources including a comprehensive range of machine tools. Appropriate electrical and electronic test equipment is used to develop detailed knowledge and understanding. Equipment throughout the academy is particularly well maintained. Technical and administrative support for tutors and learners is strong and enthusiastic.
19. Learner assessment in the Academy is good. Learners' progress is suitably recorded and monitored on a useful in-house management information system. Internal verification in the Academy is thorough and well planned. Workplace assessment is satisfactory. Learners are encouraged to take some responsibility for the frequency of assessment. Workplace mentors provide appropriate assessment by observation. Internal verification of mentors assessments is, however, insufficiently systematic and in a few cases too much evidence is collected.

20. Support for the additional learning needs of apprentices is excellent. Results of appropriate initial assessment effectively inform the recruitment process. Tutors and assessors are actively involved in monitoring apprentices for additional learning needs early in their programmes. The development of learners' literacy and numeracy is good. The Academy works well with local colleges and other specialist support agencies in helping to remove learners' barriers to progress. Some 20% of learners receive aspects of additional support. Specialist support for dyslexia and dyscalculia are readily provided.
21. The apprentice programmes are particularly well matched to the needs of AWE and the aspirations of learners. Learners come with high expectations of the apprenticeship. They enjoy their training and the progression opportunities that it provides. The apprenticeships are very closely matched to AWE's particularly specialist needs. The company sets high standards and expects a high level of commitment from learners in an environment that places quality assurance and health and safety as key priorities. Information, advice and guidance to learners before recruitment is good.
22. Learners' experience is enhanced by an excellent range of additional enrichment activities. Team-building events include residential outward-bound adventure weeks, sports activities, and good participation in community and charity events. An active apprentice association effectively represents the views of learners and is proactively engaged in developing and running events. Apprentices are encouraged to study for additional qualifications. Most progress to a higher national certificate. Opportunities to continue on to degree level study are actively promoted and supported by the company.
23. Support for learners is outstanding. Tutors work well with learners providing detailed individual support. Learners' progress is formally reviewed monthly with appropriate target-setting, but the frequency of review is readily increased when necessary. Some 100 highly skilled and supportive mentors work with learners during on site training. All have mentors received training in their role and some are NVQ assessors. All apprentices have access to a comprehensive range of AWE employee benefits and services, including comprehensive environmental health monitoring, trades union support and advice on financial matters. A professional counsellor is funded specifically to support apprentices, and learners also receive good informal support from the Academy's teaching and support staff. In one example, an apprentice has been particularly helped through rehabilitation and revised career planning.

Leadership and management

Outstanding: Grade 1

Equality of opportunity

Contributory grade: Good: Grade 2

24. Leadership and management are outstanding. AWE has clearly identified the Academy as providing an important contribution to the company's strategic plan. Strategic leadership is strong. The particularly active apprentice training committee acts as a very effective supervisory and advisory body with representatives from throughout AWE, including senior managers, staff and learners. AWE's commitment to supporting the Academy is strong. Significant resources beyond those provided by the LSC are made available. Target-setting and review is thorough, supported by good use of management information. A wide range of well presented data is readily available to monitor the performance of apprentices and the provision. Management of the health and safety of learners and staff is excellent. AWE has comprehensive health and safety arrangements, commensurate with its specialist work, which have received national recognition. These arrangements are followed rigorously in the Academy. These strengths are identified in the self-assessment report.
25. The adequacy and suitability of staff is particularly good. Many tutors and managers in the academy have completed apprenticeships at AWE and have returned with extensive experience of engineering in the specialist context of the company. Staff are very well qualified. All Academy instructors, assessors and managers have appropriate trainer and assessor qualifications. Over half have certificates of education and three have first degrees in education. The take up of well supported professional development by staff is strong. Nine workplace mentors have gained assessor qualifications.
26. Thorough and productive links are in place with Newbury and Basingstoke colleges to which the Academy subcontracts its technical certificate learning. Most of the input is provided by Newbury College. Academy staff visit frequently for formal scheduled meetings and to drop in on classes. They take an active part in the colleges' quality review boards. The Academy's quality manager regularly observes classes and graded reports are used by the colleges as part of their own quality improvement evidence. Senior staff from the colleges, and AWE, meet regularly at events to celebrate learners' success. Where matters of concern have been raised regarding the work at the colleges, AWE has responded quickly and effectively to resolve them. Newbury College is actively involved in developing additional learning programmes for the Academy, and AWE has provided wide support in the development of the colleges' action for business work.
27. Quality improvement arrangements have been extensively improved since the previous inspection and are now good. Self-assessment is appropriately inclusive with particularly valuable feedback from the workplace and subcontractors. Extensive and clearly presented data is well used to inform judgements. Self-assessment is well planned, with regular reviews throughout the year. The latest self-assessment report is largely accurate in its consideration and grading of the provision. The report did not, however, identify a few areas for improvement. Equality and diversity aspects of the provision were insufficiently considered.
28. Management of equality of opportunity and diversity is good. The procedures for safeguarding learners meet current government requirements. Appropriate criminal

records bureau checks are carried out and are suitably recorded. The Academy is strongly committed to a policy of mutual understanding and respect promoted throughout AWE. Robust arrangements are in place to eliminate bullying and harassment. Learning takes place in a safe and non-discriminatory atmosphere. Learners and Academy staff attend well considered equalities training from an external organisation at induction and there is some reinforcement of equalities awareness at annual events arranged by the company. Staff and learners awareness of equality and diversity matters is satisfactory. The Academy works hard to attract learners from under-represented groups. Work experience events are well supported and women apprentices attend careers fairs and presentations in schools. Good research has been conducted to identify potential learners from minority ethnic groups. Actions have, however, been insufficiently effective. The number of learners from under-represented groups is low, although it matches or exceeds the average for the engineering sector. Access to learning for those with limited mobility is good in the refurbished areas of the Academy and adequate in the remainder.

What learners like:

- ‘The great support we get from everyone in the academy’
- Learning opportunities provided by the programmes
- ‘The training for you as an individual’
- ‘They stretch you, the limit is yourself’
- Group environment and the team work
- ‘The instructors who have your best interests at heart’
- Well equipped workshops

What learners think could improve:

- ‘Give a better overview of what goes on at AWE’
- Time available to complete the apprenticeship
- Planning of the induction
- Parking on site
- Size of the locker room

Annex

Learners' achievements

Success rates on **work-based learning apprenticeship programmes** managed by AWE **2004 to 2007**

Programme	End Year	Success rate	No. of learners*	Provider NVQ rate**	National NVQ rate**	Provider framework rate**	National framework rate**
Advanced Apprenticeships	2004/05	overall	8	75%	48%	75%	34%
		timely	8	50%	31%	50%	22%
	2005/06	overall	21	90%	53%	90%	44%
		timely	21	62%	34%	62%	27%
	2006/07	overall	19	84%	64%	84%	58%
		timely	23	65%	43%	65%	37%
Apprenticeships	2004/05	overall	28	82%	51%	75%	39%
		timely	12	75%	29%	58%	22%
	2005/06	overall	7	43%	58%	43%	52%
		timely	7	14%	38%	14%	34%
	2006/07	overall	27	89%	65%	78%	61%
		timely	27	59%	47%	48%	44%

* Learners who leave later than originally planned are counted in the year they actually leave. This group of learners are then added to the learners who planned to complete in a given year and did so or left earlier than planned

** College and national qualification success rates are calculated using LSC published data derived from the 'Individual Learning Record'