Serco Defence, Science and Technology

Inspection date 10 July 2008

Inspection number 329230

Contents

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' monitoring 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

Serco Defence Science and Technology (SDST) subcontracts with Yeovil College for the technical certificate part of the framework.

Description of the provider

1. SDST is an operating division of Serco Group plc. Serco Group plc is a facilities management company that provides manpower and management to various civilian and government organisations. It employs over 42,000 staff throughout 35 countries worldwide. SDST is an operating division of Serco Group plc, part of which manages military and civil aviation engineering support contracts.

2. SDST has a training unit based at the Royal Naval Air Station at Yeovilton. The training unit has been co-located with the Royal Navy's Engineering Training School (ETS) since December 2006. A full-time training manager is responsible for the training unit and two full-time instructors. Twelve advanced apprentices are currently on the engineering disciplines in the mechanical and avionics trades programme. The three year programme has four learners in each year. All learners are employed by SDST. SDST has held a contract for the programme with Dorset and Somerset Learning and Skills Council since 2001. SDST makes provision for all aspects of the apprenticeship framework apart from the level 3 engineering technical certificate, which is subcontracted to Yeovil College. The training unit also provides continuous professional development and National Vocational Qualifications (NVQ) to the wider workforce.

3. Of the five learners recruited to start in September 2008, all are from Somerset and Dorset and four are aged 16–18. In 2005, the proportion of pupils gaining GCSE A* to C grades in Somerset was 56.6% compared with the national figure of 57.1%.

Summary of grades awarded

Effectiveness of provision	**Good: Grade 2**

Capacity to improve	**Satisfactory: Grade 3**

Achievement and standards	**Good: Grade 2**

Quality of provision	**Good: Grade 2**

Leadership and management	**Satisfactory: Grade 3**

Equality of opportunity	**Contributory grade: Satisfactory: Grade 3**

Sector subject area

Engineering	**Good: Grade 2**

Overall judgement

Effectiveness of provision

Good: Grade 2

4. The overall effectiveness of provision is good. Achievement and standards are good, as is the quality of provision. The provision in engineering is good, and learners who complete the programme achieve the framework within the time anticipated. Leadership and management and equality of opportunity are satisfactory.

Capacity to improve
Satisfactory: Grade 3

5. SDST demonstrates a satisfactory capacity to improve. Effective steps have been taken to tackle one of the two areas for improvement identified at the previous inspection. Slow progress towards framework completion for 2001/02 starters has been rectified. Framework completion has been good since 2005/06. Insufficient planning of some aspects of the training programme has been partially addressed. For example, key skills are now integrated into the first year of the programme, which is well planned and co-ordinated. However, all learners take key skills at level 2, the minimum requirement for the programme, and none have been set a target of level 3 key skills. Although SDST now subcontracts for an appropriate technical certificate, the subcontracting arrangements are not effective in ensuring that learners make appropriate progress on the technical certificate. SDST has not taken action to improve many areas of provision identified as satisfactory in the previous inspection. For example, arrangements for the management of literacy, numeracy and language support and the promotion of equality of opportunity have not improved.

6. Quality assurance arrangements for the programme are currently insufficient. The previous inspection identified a lack of formal arrangements with few procedures to cover the key stages of training. Action to introduce a quality assurance framework has been slow. SDST has recently reviewed the quality assurance arrangements for the training programme. However, new procedures are yet to be implemented. SDST has successfully improved the experience of the learners, largely through the high level of commitment of the instructors and their responsiveness to learner feedback. The programme is well structured to meet the needs of learners and the employer.

7. The self-assessment process is satisfactory. Good use is made of feedback from learners and staff, but feedback from stakeholders, for example, supervisors and assessors of on-the-job-training and college staff providing the technical certificate, is not systematically included in the process. The self-assessment report is broadly accurate. The grades given by inspectors agree with those in the report. However, many of the key strengths identified in the self-assessment report are normal practice, and the key areas for improvement do not fully reflect those identified at inspection. The quality improvement plan is not sufficiently detailed, for example, actions to be taken and timescales for action are not clearly identified.

Key strengths

- Good timely framework success rates
- Very effective first year of programme
- Good development of learner confidence and skills during on-the-job training
- Particularly good pastoral and academic support for learners

Key areas for improvement

- Insufficient progress in technical certificate
- Insufficient development of quality improvement arrangements

Main findings

Achievement and standards

Good: Grade 2

8. Achievement and standards are good, as identified at self-assessment. Initial difficulties with the programme structure meant that there were no framework completions in 2004/05. Timely framework success rates are very high for the last two years at 75% in both years, and are significantly above the national rate of 27% in 2005/06 and 37% in 2006/07. Overall framework success rates were also above national rates for the last two years, at 73% in 2005-06 and 80% in 2006/07, compared to national rates of 44% and 58% respectively. Retention rates are high, with most learners completing the advanced apprenticeship and progressing to employment within the company. Of those completing in August 2008, four of the five recruited are still on programme. All four have recently gained certification for their technical certificate and will complete the framework within their expected end date.

9. All learners achieve additional work-related qualifications during the first year of their apprenticeship. These broaden the roles they can undertake during on-the-job training, including carrying out basic maintenance tasks on operational aircraft without direct supervision. All learners are enthusiastic about their learning and appreciate its contribution in preparing them for the responsibilities that they are given in the workplace. All understand the importance of working with others and participate fully in all aspects of departmental life during their on-the-job training. Progression beyond the programme is good. SDST is sponsoring one former learner on an engineering degree and plans to support another learner about to complete the programme. Several ex-apprentices have completed the company's supervisor training course.

Quality of provision

Good: Grade 2

10. The quality of provision is good, as identified in the self-assessment report. Teaching and learning are good. In particular, the first year of the framework is very effective. On- and off-the-job training are well structured. A well planned five-week induction period includes an introduction to important principles of working safely with aircraft. Off-the-job training provides learners with a good knowledge and skills base preparing them thoroughly for on-the-job training and the technical certificate in years two and three of the programme. Instructors have a high level of relevant experience of the aircraft types apprentices are trained to maintain. An appropriate range of learning methods is employed during the off-the-job training, including useful research projects undertaken independently by learners who investigate aircraft systems and present their findings to their peers. However, little use is made of the learning styles assessment carried out during induction to plan differentiation in learning sessions. Summative assessment is thorough and very well structured, using an appropriate variety of formats. Learners are tested after each short, subject-specific learning module. The training unit has good access to a range of learning resources that include well provisioned classrooms belonging to the Royal Navy's engineering training school and operational aircraft undergoing depth

maintenance. Learners make good use of the training unit's internet suite to support learning and complete assignments.

11. Learners quickly develop confidence and skills during on-the-job training, which helps them to play a full and useful part in their work placements. In the first year of the apprenticeship, learners are introduced to on-the-job training in a range of work placements. This allows learners to make informed choices about where they would like to spend their final work placement. Periods of on-the-job training are incrementally increased allowing learners to build confidence and experience in the workplace. The transition into their final work placement for the last two years of the programme is particularly carefully managed. Good communication between the instructors and workplace supervisors is maintained throughout the on-the-job training, and the suitability of work placements for each individual is continually assessed. Where it is judged to be beneficial, learners are reassigned to new work placements. Workplace supervisors have a good understanding of the requirements of the on-the-job training and are able to provide relevant and interesting tasks that learners enjoy. The needs and interests of both learners and employers are met well.

12. Adequate progress reviews take place at least every 12 weeks. In addition, regular informal contact between instructors, learners and supervisors effectively supports learners' progress. Target-setting in reviews is not specific. Although this is intended to provide flexibility, as opportunities to access suitable tasks are unpredictable, it does not provide sufficient challenge for learners.

13. Learners make insufficient progress on the technical certificate. Teaching of the technical certificate is significantly disrupted by inadequate staffing levels. Insufficient appropriate staff are available for some learning sessions and some learners rely heavily on SDST to support their learning for the technical certificate. Assignments are not always set on time, and deadlines for submission are often unrealistic. Assessment feedback, including the requirements for re-working assignments, is not timely. Although those learners in year two of the technical certificate have achieved certification, those in year one have not yet completed all their assignments. SDST gives learners additional time to complete the work, but this is achieved through disrupting the on-the-job training.

14. Pastoral and academic support for learners is particularly good. Instructors provide sensitive and appropriate pastoral support to learners. This is evident in the practical help they give them to settle quickly into the programme, for example, by helping them to make car sharing arrangements. Throughout the apprenticeship, the instructors maintain regular contact with learners and work with their supervisors to ensure that they are given appropriate support whenever it is needed. Learners benefit from very good academic support throughout the framework. This is most evident in the additional support given for the technical certificate to ensure that the impact of college staff shortages is minimised. Guidance and support for progression is good.

Leadership and management

Satisfactory: Grade 3

Equality of opportunity   Contributory grade: Satisfactory: Grade 3

15. Leadership and management are satisfactory, as identified in the self-assessment report. SDST has a strategic commitment to the advanced apprenticeship programme as a means of regenerating an aging workforce and bringing young people into the company with the potential for promotion. The training unit manager has strategic responsibility for the provision, and attends fortnightly SDST managers' meetings. These meetings are used to update the company about the programme, as appropriate. The management of resources is effective. Good partnership work with the Royal Navy engineering training school extends the resources available to the programme. Day-to-day management of the programme is devolved to the two instructors in the training unit. Termly meetings with the training unit manager are recorded. These meetings include a core agenda and additional items for discussion. The day-to-day management of the programme is largely informal. Communication within the team, and with all staff linked to the provision, is generally informal and is effectively used to resolve day-to-day issues. The use of management information is satisfactory, and is appropriate for a provider with a small number of learners. SDST focuses on appropriate staff development, the manager and instructors attend a variety of external events to update them on education and training developments. However, the impact of these activities is not monitored. Assessment and internal verification practise is satisfactory overall.

16. Management of literacy and numeracy support is satisfactory, although SDST does not have a written policy on literacy and numeracy support. The recruitment process is rigorously applied. All apprentices have GCSE qualifications at A*-C grades in English, mathematics and a science subject. Initial assessment is thorough. On the rare occasions that additional support needs are identified, for example, learners who are dyslexic, appropriate specialist support is provided by arrangement with the local college. The procedures for safeguarding learners meet current government requirements. All SDST staff are checked with the criminal records bureau.

17. Quality improvement arrangements are insufficiently developed. Although SDST has a clear commitment to providing good training, it does not currently have a formal quality assurance policy or procedures to monitor and systematically improve the quality of the training programme. A recent review has resulted in a written plan for specific quality assurance mechanisms to be introduced in the near future. These mechanisms include regular auditing of the management of training, training documents, delivery of training and the evaluation of training. Currently, session plans are not sufficiently detailed, and do not include differentiated activities which take individual learning styles into account. Arrangements for the annual observation of teaching and learning by the senior instructor of the Royal Navy engineering training school have been recently introduced. However, the process does not include action-planning to improve teaching and learning activities. Subcontracting arrangements with the college are as yet ineffective, as identified in the self-assessment report. Although this is largely a result of staffing difficulties in the college which are beyond the control of SDST, the service level agreement is not sufficiently specific to support SDST in ensuring the quality of subcontracted provision. The agreement includes the potential for joint working between the college and SDST for staff development activities and to share good practice, but does not specify how this is to be implemented. SDST has effective formal arrangements to gather feedback from learners throughout the programme. Issues raised by learners are acted upon where possible, for example, the timing and length of on- and off-the-job learning during the first year. Learners' concerns about the technical certificate have not been resolved, although

SDST has provided extensive support for learners to help them to overcome barriers to completion.

18. Equality of opportunity is satisfactory. SDST operates an effective company-wide equal opportunities policy. Learners feel safe and well protected as employees of the company. Learners are given an appropriate introduction to equal opportunities issues at induction and in the first year of training through the employment rights and responsibilities and customer service units. SDST has recently introduced citizenship sessions during the first year, which extend learners' awareness of relevant issues. The citizenship sessions will be built into the programme next year, a clear purpose and scheme of work for these sessions has yet to be formulated. Although progress reviews during the second and third year of the programme check whether learners feel that they are receiving equal opportunities in the workplace they do not check their level of understanding of equal opportunities issues in general. The monitoring of recruitment and performance data for different groups is satisfactory. SDST does not adopt strategies to recruit under-represented groups. At the time of the previous inspection there were three female learners, currently there are two, but one of these is about to complete the programme. No females have been recruited since the cohort beginning in 2006/07. SDST does not have any firm plans to market and promote the provision to attract females or other under-represented groups.

What learners like:

- 'Training unit staff are always there when you need them'
- Well structured first year
- 'Teaching in year one gave me a good understanding'
- Good learning opportunities in work placements
- 'Pay is good'
- 'Chances to fly during training'
- Hangar experience – in short spells

What learners think could improve:

- Number of lecturers at the college – not enough

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Annex

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Learners' achievements

Success rates on **work-based learning apprenticeship programmes** managed by the provider/college **2004** to **2007**

Programme	End Year	Success rate	No. of learners*	Provider/college NVQ rate **	National NVQ rate**	Provider/college framework rate**	National framework rate**
Advanced Apprenticeships	2004/05	overall	2	0	48	0	34
		timely	2	0	31	0	22
	2005/06	overall	11	73	53	73	44
		timely	12	75	34	75	27
	2006/07	overall	5	80	64	80	58
		timely	4	75	43	75	37

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

Website: www.ofsted.gov.uk