INSPECTION REPORT

Rolls-Royce Plc (Derby)

17 March 2006



Adult Learning Inspectorate

The Adult Learning Inspectorate (ALI) was established under the provisions of the *Learning* and *Skills Act* 2000 to bring the inspection of all aspects of adult learning and work-based learning within the remit of a single inspectorate. The ALI is responsible for inspecting a wide range of government-funded learning, including:

- · work-based learning for all people aged over 16
- provision in further education colleges for people aged 19 and over
- **learndirect** provision
- Adult and Community Learning
- training funded by Jobcentre Plus
- education and training in prisons, at the invitation of Her Majesty's Chief Inspector of Prisons
- adult information, advice and guidance services (**nextstep**).

Inspections are carried out in accordance with the Common Inspection Framework by teams of full-time inspectors and part-time associate inspectors who have knowledge of, and experience in, the work which they inspect. All providers are invited to nominate a senior member of their staff to participate in the inspection as a team member.

Pre-inspection analysis

The resources allocated to a cycle 2 inspection are primarily determined by the findings from the previous inspection. Account is also taken of information about achievement and retention obtained from the funding body, and any significant changes in the size or scope of the provision.

Where a provider has received good grades in cycle 1, the cycle 2 inspection is relatively light. If the provider offers a number of areas of learning, a restricted sample is inspected.

Where a provider has received satisfactory grades in cycle 1, the cycle 2 inspection is less intensive and it is possible that not all areas of learning are included.

Where there are significant unsatisfactory grades from cycle 1, the intensity of the cycle 2 inspection is broadly the same as cycle 1, and all significant areas of learning are inspected.

Providers that have not previously been inspected will receive a full inspection.

Overall effectiveness

The grades given for areas of learning and leadership and management will be used to arrive at a judgement about the overall effectiveness of the provider.

An **outstanding** provider should typically have leadership and management and at least half of the areas of learning judged to be a grade 1. All area of learning grades will be graded 1 or 2.

A **good** provider should have leadership and management and at least half of the area of learning grades judged to be a grade 2 or better. A good training provider should not have any grade 4s, and few grade 3s in the areas of learning.

A **satisfactory** provider should have adequate or better grades in leadership and management and in at least two thirds of the area of learning grades. An adequate provider might have a range of grades across areas of learning, some of which might be graded 4.

Provision will normally be deemed to be **inadequate** where more than one third of the area of learning grades and/or leadership and management are judged to be inadequate.

The final decision as to whether the provision is inadequate rests with the Chief Inspector of Adult Learning.

Grading

Inspectors use a four-point scale to summarise their judgements about the quality of provision in occupational/curriculum areas and Jobcentre Plus programmes, as well as to summarise their judgements about the quality of learning sessions. The same scale is used to describe the quality of leadership and management, which includes equality of opportunity and quality assurance. The descriptors for the four grades are:

- grade 1 outstanding
- grade 2 good
- grade 3 satisfactory
- grade 4 inadequate

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INSPECTION REPORT

DESCRIPTION OF THE PROVIDER

- 1. Rolls-Royce Plc is one of the world's leading engineering companies, supplying aero engines and power systems to national and international markets. It employs 35,400 people and operates in 50 countries. Approximately 10,000 of these are based on the Derby site. Rolls-Royce has provided apprenticeship training for many years and there are currently 189 apprentices in training. Rolls-Royce is subdivided into business units, each operating as a separate entity, with its own management structure, income and expenditure targets, and staffing structure. Learning and career development is part of the human resources function and provides training programmes and courses for Rolls-Royce employees and customers. Traditionally, Rolls-Royce has satisfied its own internal business needs but has recently offered an Engineering Skills Community Training (ESCT) programme to provide training not only to Rolls-Royce internal businesses but also to external small and medium-sized companies in the east Midlands area.
- 2. The learning and career development centre, opened in 2000 at a cost of £10 million, is located at the Derby site and is one of the centres used for company and customer training. Currently, there are 18 training rooms, three interview rooms, two study booths, 10 learning/work zones and a research centre equipped with various resources including the internet, a workshop, a Centre of Vocational Excellence (CoVE) classroom and a large conference room. There has also been investment in resource centres located within other business units and the development of an open access centre for employees and the local community. The CoVE delivery team is part of Rolls-Royce's human resources function and is made up of one full-time learning delivery manager, seven full-time instructors, two temporary instructors, eight training officers and two part time Learning and Skills Council (LSC) contract managers/administrators.
- 3. Work-based learning programmes are funded through contracts with Derbyshire LSC. Rolls-Royce recruits most of its learners from the immediate locality. It operates its own recruitment campaigns, working closely with schools and colleges, and attends career events. The entry level for all applicants is a minimum of four general certificates of secondary education (GCSEs) at grade D or above for practical apprentices and grades C or above for technician apprentices. Grades must include mathematics, science and English and a practical subject. The selection and recruitment process involves three interviews covering motivation and achievement, competency and technical knowledge and understanding, as well as a manual dexterity test.
- 4. The proportion of people from minority ethnic groups in Derby, and Derbyshire as a whole, are 12.4 per cent and less than 1 per cent respectively, compared with the national average of 8.6 per cent. In Derby, manufacturing accounts for 22.4 per cent of adult employment, compared with 14.8 per cent nationally. In June 2005, the unemployment rate in Derby was 2.9 per cent, compared with the national average of 2.3 per cent. In Derby in 2004, the proportion of young people achieving five or more GCSEs at grade C or above was 48.8 per cent, compared with the national average of 53.7 per cent. The proportion of 16 year olds who stayed in full-time education in 2003-04 was 63 per cent in Derby, compared with the national average of 72 per cent. Similarly, the proportion of 17

1

year olds who stayed in full-time education in 2003-04 was 51 per cent in Derby, compared with the national average of 59 per cent.

OVERALL EFFECTIVENESS

Grade 3

- 5. The overall effectiveness of the provision is satisfactory. Leadership and management are satisfactory, as are the arrangements for quality improvement. Arrangements for equality of opportunity and the training in engineering and manufacturing technologies are good.
- 6. The inspection team had little confidence in the reliability of the self-assessment process. The self-assessment report is insufficiently rigorous. Rolls-Royce produced its self-assessment report in July 2005 and updated it in February 2006, immediately before the inspection. The report is not critical enough and many of the strengths in the report are no more than compliance with contract requirements. The self-assessment process has improved since the previous inspection in that more stakeholders are involved in the process, but learners and employers are not sufficiently consulted and many of them are unaware of the self-assessment report. The self-assessment report identified some of the strengths identified by inspectors, but inspectors' findings matched only a few of the judgements made in the report. The self-assessment report does not acknowledge any weaknesses. It does not present a realistic view of the provision.
- 7. The provider has demonstrated that it has sufficient capacity to make improvements. The provider responds quickly to weaknesses as they become apparent, and has resolved several weaknesses from the previous inspection. However, the self-assessment process is not critical enough to identify key weaknesses.

KEY CHALLENGES FOR ROLLS-ROYCE PLC (DERBY):

- improve arrangements for quality improvement
- increase the management focus on retention and achievement trends
- improve progress reviews
- improve timely achievement rates
- improve accuracy of self-assessment

GRADES

grade 1 = outstanding, grade 2 = good, grade 3 = satisfactory, grade 4 = inadequate

Grades awarded at inspection

Leadership and management	3
Contributory grades:	
Equality of opportunity	2
Quality improvement	3

Engineering and manufacturing technolo	2	
Contributory areas:	Number of learners	Contributory grade
Engineering		2
Apprenticeships for young people	189	2

ABOUT THE INSPECTION

- 8. Rolls-Royce provides work-based learning for 126 of its own employees on practical and technician advanced apprenticeships in engineering. There are also 63 employees from 29 ESCT companies, who currently use Rolls-Royce for apprenticeship training. The training programme takes 42 months to complete and consists of on- and off-the-job training and assessment. All Rolls-Royce learners are employed and are placed with a business unit according to their chosen training programme. All learners who complete their training programme progress into employment with the company. Learners who are employed in other companies attend Rolls-Royce for training and assessment and are visited in their workplaces for assessment and progress reviews.
- 9. The inspection included Rolls-Royce's provision of engineering training, and its leadership and management, including the arrangements for equality of opportunity and quality improvement. Inspectors spent four days with the provider during March 2006.

Number of inspectors	4
Number of inspection days	16
Number of learners interviewed	50
Number of staff interviewed	41
Number of employers interviewed	11
Number of subcontractors interviewed	1
Number of locations/sites/learning centres visited	16
Number of visits	1

KEY FINDINGS

Achievements and standards

- 10. **Retention and achievement rates are good.** For those who started in 1999-2000, the retention rate was 81 per cent and the achievement rate was 79 per cent. For the 2000-01 starters, the achievement rate was 55 per cent for learners from ESCT and 80 per cent for Rolls-Royce learners. Of the 151 who have joined the programme since 2003, over 92 per cent are still in learning. For the 2000-01 starters the achievement rate is 55 per cent for learners from ESCT and 80 per cent for Rolls-Royce learners.
- 11. Learners develop very good technical skills and personal skills. Rolls-Royce learners

perform consistently to the demanding standards of work in the aero-engine industry as members of production teams. Learners from ESCT companies are also developing very good skills.

- 12. **Progression into employment and posts of responsibility is good.** All Rolls-Royce learners who complete their apprenticeships are employed in the company. Recent first appointments for learners have been as performance technicians, product definition engineer, machinists and fitters. Career advancement for former Rolls-Royce apprentices is good with many progressing to become supervisors, departmental managers and, in some cases, directors. Learners from many ESCT companies are also progressing well to posts of responsibility.
- 13. Learners make slow progress towards completion of their framework. Of the 71 learners from the 1999-2000 intake, 70 per cent completed their framework after their planned end date and of the 45 completers from the 2000-01 starters, 97 per cent completed later than the planned end date. Only 45 per cent of learners from the 2001-02 starters have completed their framework and 27 per cent are still in learning.

The quality of provision

- 14. Learners benefit from a very good range of additional qualifications and enrichment activities. They also achieve other nationally recognised certificates and some progress to engineering degrees. The company encourages and supports learners in education liaison activities, community projects, apprentice association activities and business attachments. The projects are very successful in developing the personal, team and project management skills of learners while making a positive contribution to the community. Rolls-Royce has worked very successfully in collaboration with two partner organisations from the arts to facilitate the integration of creativity into the technical and practical skills development of learners. Within a business-training context, these projects have integrated the acquisition of technical skills with personal, critical and creative thinking skills through engagement with the work of artists.
- 15. As at the time of the previous inspection, training continues to be particularly good, especially the off-the-job training. Learners complete an initial period of basic skills competence training in the training workshops, working towards a national vocational qualification (NVQ) at level 2 in performing engineering operations. The well-equipped workshop provides learners with a good introduction to basic fitting, machining and other practical engineering skills. Learners are given a range of well-planned, structured practical tasks to increase their skill level and confidence. Following the training workshop phase, learners progress onto a very well-planned period of on-the-job training in a wide range of good placements.
- 16. Throughout the training programmes, all learners have good access to a wide variety of excellent resources, including the well-equipped first-year training centre which has an extensive range of good practical equipment. Learners' training requirements include on- and off-the-job attachments, further education courses, specific in-company training courses and distance learning through the information technology (IT)-based learning facilities and learning resources centres at Derby. In the workplace, Rolls-Royce learners, in particular, benefit from placements in leading laboratories, design offices, manufacturing cells, modern production lines, maintenance teams, materials sourcing or

state-of-the-art engine test-bed facilities. Learners from ESCT companies have access to all of the facilities at the training centre, in addition to the good workplace resources within their own companies.

- 17. Since Rolls-Royce took over the ESCT programme it has developed very supportive partnerships with employers, particularly the smaller and medium-sized companies. The close support given to employers in topics such as training consultancy, mentor training, NVQ and key skills portfolio compilation is helping employers to improve the management of the on-the-job training of their learners. Additional support includes direct assistance from Rolls-Royce purchasing teams and delivering NVQs in business improvement techniques. Rolls-Royce has made intensive efforts to support learners and their employers in a small number of companies that have been forced to close down.
- 18. The arrangements for providing additional learning support are satisfactory. Very few learners need additional support in literacy, numeracy and language. Of the 60 learners recruited in 2005-06, only three were identified as needing additional support.
- 19. Progress reviews were insufficiently thorough at the previous inspection and they remain weak. Action plans resulting from the reviews do not include clear short-term targets and there are insufficient references to the achievement of key skills. Aspects of equality and health and safety are given cursory attention or not discussed at all.
- 20. At the previous inspection, internal verification of portfolios was weak. Some aspects of internal verification continue to be weak. The portfolios for the NVQ at level 3 and key skills are still not monitored by an internal verifier until all the units have been completed. Formal meetings between assessors and internal verifiers have still not taken place.

Leadership and management

- 21. Management of training overall is satisfactory. However, managers do not pay sufficient attention to trends in retention and achievement and have done little to correct or explore the reasons for the lower achievement in the community learning part of the provision.
- 22. Day-to-day management of the off-the-job training programmes is good with effective use of resources. Staff are fully aware of their roles and responsibilities. Management puts a high priority on staff development. Staff are encouraged and supported to broaden their technical and teaching skills. Planning of the apprenticeship programme is satisfactory. Targets for framework completion are set and reviewed at management meetings. Health and safety is given a high priority, particularly in the training centre.
- 23. The provider has built on the good arrangements for collecting learners' views and using them to improve aspects of the provision. Learners work productively in small teams of about eight to monitor their own progress and to identify problems with their day-to-day activities. Staff take learners' views very seriously and respond formally to concerns raised by learner representatives in staff meetings. Learners record staff responses and monitor any actions agreed with staff. The team approach to eliciting regular and formal feedback is supplemented by learner questionnaires, which are

systematically analysed and effectively used in the quality improvement management system.

- 24. The training department has devised an innovative approach to the management and planning of quality improvement, known as the 'flight deck'. The system replicates the visual quality improvement systems used throughout Rolls-Royce to assist quality improvement. Activities are systematically planned, well recorded and easily monitored.
- 25. The strengths in staff development that were identified at the previous inspection have been maintained. Rolls-Royce encourages applications for staff development to meet personal as well as corporate training needs. Training needs are accurately identified from individual targets and strategic and operational priorities. Staff continue to benefit from good access to an extensive range of courses and qualifications.
- 26. Rolls-Royce has a very effective strategy to promote inclusion and widen participation. Rolls-Royce is very active in schools and has good links with community organisations and community leaders, which it has used well to reach learners from minority ethnic communities. Rolls-Royce frequently attends skills festivals, careers evenings and targeted events to reach under-represented groups. Many visits have also been arranged to Rolls-Royce specifically for women. Rolls-Royce has established links with an increasing numbers of primary schools, particularly those that feed into secondary schools already linked with Rolls-Royce.
- 27. Rolls-Royce carries out a fully detailed analysis of its recruitment data and makes excellent use of data to plan its recruitment activities with respect to increasing diversity in the workplace. Detailed reports are produced each year which analyse applications by age, gender and ethnic origin as well as identifying applications by school. The number of applications from women has increased from seven applicants in 2002 to 29 applicants in 2005. Similarly the number of applications from minority ethnic communities has increased from 20 applicants in 2002 to 84 applicants in 2005. This detailed analysis allows Rolls-Royce to identify that the aptitude tests are unintentionally disadvantaging applicants from minority ethnic communities and changes have been made in the recruitment process accordingly. However, the increased number of applications from under-represented groups has not yet resulted in increased numbers of recruits from these groups.
- 28. Rolls-Royce has established good strategic links to promote engineering. Managers and staff represent Rolls-Royce on many key committees, including sector skills councils, awarding bodies, national skills panels and technical steering committees. Learners benefit from Rolls-Royce playing such a key role in engineering.
- 29. The arrangements for quality improvement are satisfactory. Many of the key weaknesses identified at the previous inspection have been successfully dealt with. Quality improvement is managed through a well-attended and well-supported quality improvement group. However, weaknesses in progress reviews, incomplete quality assurance systems and internal verification still remain. The provider has been slow to act on these weaknesses.
- 30. The management and use of data is broadly satisfactory. The database is updated regularly and provides useful reports to monitor achievement against contract targets and

to help set individual targets for staff. Accurate reports are produced but managers do not use them effectively to judge the quality of the provision.

- 31. Communications are satisfactory. Formal communication systems are effectively maintaining the high standard of training. External communications are good and promote the company's initiatives in widening participation.
- 32. Rolls-Royce has a strong approach to anti-bullying and anti-harassment, and has recently introduced a 'dignity at work prevention of harassment in the workplace' policy, which replaces the previous anti-bullying and anti-harassment policy. Learners understand equality and diversity issues and know how to deal with difficulties. Rolls-Royce does not maintain a complaints log, but all learners have opportunities to air grievances through frequent reviews or through learner forums.
- 33. Access to Rolls-Royce premises is good for learners who have restricted mobility. The new training centre is built to be compliant with the requirements of the Disability Discrimination Act 1995. The employers that offer work placements do not show offensive material in the workplace and most employers have clean, welcoming work environments.
- 34. **Systems for quality assurance remain incomplete.** There is still insufficient formal monitoring and quality assurance of some key processes such as teaching, learning, assessment and progress reviews. The weakness in internal verification has been dealt with on level 2 programmes but remains at level 3 and on key skills programmes. Little progress has been made on the formal quality assurance of teaching and learning and progress reviews.
- 35. Rolls-Royce does not effectively reinforce learners' understanding of equality and diversity or continue to raise learners' awareness. Learners receive adequate training on equality during their induction, but currently there are no further training sessions during their programmes. Monitoring of equality at reviews is only cursory.
- 36. The self-assessment report is insufficiently rigorous. Rolls-Royce produced its self-assessment report in July 2005 and updated it in February 2006, immediately before the inspection. The self-assessment report identified some of the strengths identified by inspectors but inspectors' findings matched only a few of the judgements made in the report.

Leadership and management

Strengths

- good management and development of staff performance
- good strategic links to promote engineering
- very good initiatives to widen participation
- excellent use of data for equality of opportunity
- exceptionally good use of feedback from learners
- innovative approach to planning and management of quality improvement

Weaknesses

- insufficient management action to stop the decline in retention and achievement rates for ESCT learners
- insufficient reinforcement of equality of opportunity
- incomplete quality assurance systems
- insufficiently rigorous self-assessment report

Engineering and manufacturing technologies

Engineering

Strengths

- good retention and achievement rates
- very good development of skills
- very good progression for learners
- · very good range of additional qualifications
- · particularly good training
- good access to excellent resources
- good support for employers

Weaknesses

- slow progress towards framework completion
- weak progress reviews
- weak aspects of internal verification

WHAT LEARNERS LIKE ABOUT ROLLS-ROYCE PLC (DERBY):

- · learning new skills and trades
- 'I enjoy finding out how CNC machines work'
- · additional courses
- · friendly assessors
- · additional responsibilities in the workplace
- 'tutors listen to us and change things to make them better'
- the variety in the work
- being a science ambassador and working with schoolchildren
- going on the German exchange
- 'working on aero engines for Rolls-Royce is awesome'

WHAT LEARNERS THINK ROLLS-ROYCE PLC (DERBY) COULD IMPROVE:

- better information on key skills at an earlier stage
- the co-ordination between the college and Rolls-Royce
- the consistency between assessors
- · inclusion for all in the outdoor training event

DETAILED INSPECTION FINDINGS

LEADERSHIP AND MANAGEMENT

Grade 3

Strengths

- good management and development of staff performance
- good strategic links to promote engineering
- very good initiatives to widen participation
- excellent use of data for equality of opportunity
- exceptionally good use of feedback from learners
- innovative approach to planning and management of quality improvement

Weaknesses

- insufficient management action to stop the decline in retention and achievement rates for ESCT learners
- insufficient reinforcement of equality of opportunity
- incomplete quality assurance systems
- · insufficiently rigorous self-assessment report
- 37. Learning and career development is a department within Rolls-Royce's human resources function, and it is responsible for the provision of the apprenticeship training programme. The CoVE delivery team is managed by a head of learning services and is made up of one full-time learning delivery manager, seven full-time instructors, two temporary instructors, eight training officers and two part-time LSC contract managers/administrators. The training instructors, training officers and the head of learning services meet regularly to review and monitor the apprenticeship training programme.
- 38. The management and development of staff performance is good. The training and development section uses the Rolls-Royce development system across the company. Performance objectives for staff at all levels are derived from the team objectives which are clearly linked to company strategy. Other objectives are derived from quality improvement targets identified through the 'flight deck' system. Training needs are accurately identified from individual targets and strategic and operational priorities. Strengths in staff development identified at the previous inspection have been maintained. Staff continue to benefit from good access to an extensive range of courses and qualifications. The whole process is well managed with clear priorities operated within the training budget. Rolls-Royce encourages applications for staff development to meet personal as well as corporate training needs.
- 39. Rolls-Royce has established good strategic links to promote engineering. Managers and staff represent Rolls-Royce on many key committees to shape the future of engineering in the United Kingdom, including sector skills councils, awarding bodies, national skills panels and technical steering committees. Learners benefit from Rolls-Royce playing such a key role in engineering.

- 40. The management and use of data is broadly satisfactory. The database is updated regularly and provides useful reports to monitor achievement against contract targets and to set targets for individual staff. Reports on overall achievement for each intake are also produced and used in self-assessment. The reports are accurate and well produced but managers do not use them effectively to judge the quality of the provision.
- 41. Communications are satisfactory. Internal communications effectively promote a good dialogue between training staff, learners and staff in the workplace. Formal communication systems are effective in maintaining the high standard of training within the provider. External communications are good and promote the company's initiatives of widening participation and increasing the influence of Rolls-Royce in shaping the training in the engineering sector.
- 42. Management of training overall is satisfactory. Managers have created the conditions in which retention and achievement, the quality of training and the development of learners' skills are all good. However, managers do not pay sufficient attention to trends in retention and achievement and have done little to correct or explore the reasons for the lower achievement in the community learning part of the provision.

Equality of opportunity

Contributory grade 2

- 43. Rolls-Royce has a very effective strategy to promote inclusion and widen participation. Rolls-Royce is very active in schools and has good links with community organisations and community leaders, which they have used well to reach learners from minority ethnic communities. Rolls-Royce frequently attends skills festivals, careers evenings and targeted events to reach under-represented groups. For example, staff have attended recruitment fairs at a Sikh temple, the south Asian art festival and community events in the Pakistani community centre. Rolls-Royce has also organised a summer camp for the West Indian community association and attended two further presentations at a West Indian fellowship. Many visits have also been arranged to Rolls-Royce specifically for women. Apprentices participate in the 'earn to learn' scheme by frequently attending schools as ambassadors for careers in engineering. Local community leaders have been invited into Rolls-Royce for visits on several occasions to continually improve links and generate mutual understanding. Rolls-Royce has a nominated staff member who is responsible for equality and diversity. A local strategy paper was produced in 2004 identifying under-represented groups to be targeted and suggesting mechanisms to reach them. The exercise associated with this strategy paper identified that Rolls-Royce had, to that point, focused its education liaison activities on 11-16 year olds, with gaps in engaging primary school pupils. Since then, Rolls-Royce has established links with increased numbers of primary schools, particularly those that feed into secondary schools already linking with Rolls-Royce. To support this initiative, Rolls Royce produced clear career progression charts, posters, fliers, job descriptions and information packs for schools and the Connexions service as well as the local community centres.
- 44. Marketing literature is available in several languages, including English, Urdu and Punjabi, and includes non-stereotypical images and success stories of suitable role models. Good efforts have been made to target recruitment activities in areas where there are higher proportions of people from minority ethnic groups. Rolls-Royce estimates that more than 10,500 children have attended Rolls Royce presentations, visits and activities in the Derby area and are now also contacting youth groups and luncheon clubs run by local minority ethnic community leaders.

- 45. Rolls-Royce carries out a fully detailed analysis of its recruitment data and makes excellent use of data to plan recruitment activities to increase diversity in the workplace. Detailed reports are produced each year analysing applications by age, gender and ethnic origin as well as identifying applications by school. The data shows that Rolls-Royce's initiatives to attract applicants from a more diverse group have been successful, but this has not yet translated into final recruits. The number of applications from women has increased from seven in 2002 to 29 in 2005. Similarly, the number of applications from minority ethnic communities has increased from 20 in 2002 to 84 in 2005, representing 16 per cent of the applicants. Rolls-Royce also carries out a detailed analysis of applicants who are rejected at various stages of the recruitment process. This allowed Rolls-Royce to identify that the aptitude tests were unintentionally disadvantaging applicants from minority ethnic communities and changes were made. In 2005, only one of the 29 women who applied were recruited. Similarly in 2005, of the 84 applicants from minority ethnic communities, offers were made to two. These figures have already started to influence recruitment and marketing activities for the next recruitment cycle. Currently, two of the 189 engineering apprentices are women and four are from minority ethnic groups.
- 46. Rolls-Royce has a clear commitment to equality and diversity and has a suitable range of policies and procedures. It has a strong approach to anti-bullying and anti-harassment and has recently introduced a 'dignity at work - prevention of harassment in the workplace' policy which replaces the previous anti-bullying and anti-harassment policy. This policy provides clear definitions and examples of harassment and unacceptable behaviour as well as the roles of the company, employees and learners. All staff and learners have access to the policies through the intranet. An online training module on diversity is available on the intranet and is mandatory for all employees to complete before July 2006. A range of seven modules on equality and diversity is being introduced in April to all learners and staff along with cultural visits. Rolls-Royce's commitment to equality of opportunity is referenced in many documents, including its contracts with employers, information given to learners and their contracts with subcontracting colleges. Learners understand equality and diversity and know how to deal with difficulties. Rolls-Royce does not maintain a complaints log but all learners have the opportunity to air grievances through frequent reviews and learner forums. Learners speak highly of the support they receive from their training officers and are confident that they can talk to them about difficulties.
- 47. Rolls-Royce does not effectively reinforce learners' understanding of equality and diversity or continue to raise their awareness. Learners receive adequate training on equality during their induction, but there are no further training sessions during their programmes. Coverage or monitoring of equality at reviews is cursory. Learners have a basic understanding of equality and diversity and are knowledgeable about their rights and responsibilities. Rolls-Royce now has an established schedule of equality and diversity training events which will start in April 2006.
- 48. Access to Rolls-Royce premises is good for those with restricted mobility. The new training centre complies with the requirements of the Disability Discrimination Act 1995. The employers that offer work placements do not show offensive material in the workplace and most employers have clean, welcoming work environments.

Quality improvement

Contributory grade 3

49. The arrangements for quality improvement are satisfactory. Many of the key

weaknesses identified at the previous inspection have been dealt with. However, weaknesses in progress reviews, quality assurance systems and internal verification still remain. The provider has been slow to act on these weaknesses.

- 50. Rolls-Royce has maintained its accreditation with the ISO 9001 international standard for quality assurance. Quality improvement is managed through a well-attended and well-supported quality improvement group. The apprentice training department continues to use its process flowcharts, which supplement the quality improvement policy and set out its approach to quality improvement.
- 51. The provider has built on the good arrangements for collecting learners' views and using them to improve aspects of the provision. Learners work productively in small teams of eight. Teams hold weekly meetings to monitor their own progress and that of the team and to identify problems with their day-to-day activities. A representative from each team attends formal staff meetings to present their views, opinions and comments on the programmes. Staff take learners' views very seriously and respond formally. Learners record staff responses and monitor any actions agreed with staff. For example, additional training, improvements in work practices and accommodation have been made after feedback. Teamwork makes a significant contribution to the development of learners' skills in negotiation, communication and management of meetings. The team approach to eliciting regular and formal feedback is supplemented by questionnaires, which are systematically analysed and used in the quality improvement management system.
- 52. The apprentice training department has devised an innovative approach to the management and planning of quality improvement, known as the 'flight deck'. The system replicates the visual quality improvement systems used throughout Rolls-Royce to assist quality improvement. Activities are systematically planned, well recorded and easily monitored. Audits of quality improvement plans are relatively new and are proving to be effective in monitoring improvements and managing plans as working documents.
- 53. Systems for quality assurance remain incomplete. For example, there is still insufficient formal monitoring and quality assurance of some key processes such as teaching, assessment and progress reviews. Assessment and internal verification were weak at the previous inspection. Assessment weaknesses have been dealt with on all programmes. The weakness in internal verification has been dealt with on level 2 programmes but remains at level 3 and on key skills programmes. Little progress has been made on the formal quality assurance of teaching and learning and progress reviews. Despite these shortcomings in process, the outcomes, in terms of the standard of the training, the development of technical and personal skills and the overall achievement of learners, are good. However, the provider has not recognised that within the overall good achievement rates there is a declining trend and some less good achievement. There is no reference to this in any of the formal quality improvement documents and there are no plans to deal with this.
- 54. The self-assessment report is insufficiently rigorous. Rolls-Royce produced its self-assessment report in July 2005 and updated it in February 2006, immediately before the inspection. The report is not critical enough and many of the strengths are no more than compliance with contract requirements. The self-assessment process has been improved since the previous inspection in that Rolls-Royce now includes more stakeholders in the process, but learners and employers are not sufficiently consulted and many of them

are unaware of the self-assessment report. The report identified some of the strengths identified by inspectors, but inspectors' findings matched only a few of the judgements made in the report. The self-assessment report does not acknowledge any weaknesses and does not present a realistic view of the provision. For example, a weakness in incomplete quality assurance systems identified in an earlier version of the self-assessment report is cited as a significant strength in the latest report update, without adequate supporting evidence.

AREAS OF LEARNING

Engineering and manufacturing technologies

Grade 2

Contributory areas:	Number of learners	Contributory grade
Engineering		2
Apprenticeships for young people	189	2

55. Rolls-Royce provides work-based learning for young people in engineering. At the previous inspection in 2002, all learners were employed by Rolls-Royce. In 2003 the company integrated an ESCT programme, from another provider, into its own apprenticeship scheme to offer engineering apprenticeship training for employers in the local community. There are 188 advanced apprentices and one apprentice in engineering.

56. Off-the-job training is delivered by Rolls-Royce at its Derby training centre. Learners attend Derby College on day release for their technical certificates. The Rolls-Royce learners attend the Derby training centre full time during the first year and work towards an NVQ at level 2 in performing engineering operations. ESCT learners receive the same basic training at the centre, on a programme of short modules to meet the needs of their employers, and work towards the level 2 NVQ through on- and off-the-job training. After completion of their NVQ at level 2, learners work towards an NVQ at level 3 and continue with their technical certificates. On completion of their technical certificate, many learners work towards a range of additional qualifications at local colleges. On-the-job training is provided by Rolls-Royce for its own apprentices and on employers' sites for the ESCT apprentices. Key skills training and assessment is carried out throughout the training programme. Progress reviews take place every eight to 12 weeks in the workplace by training officers who also carry out assessments.

Engineering

Strengths

- good retention and achievement rates
- · very good development of skills
- very good progression for learners
- · very good range of additional qualifications
- · particularly good training
- good access to excellent resources
- good support for employers

Weaknesses

- slow progress towards framework completion
- weak progress reviews
- weak aspects of internal verification

Achievement and standards

- 57. Retention and achievement rates are good for advanced apprentices. For the 1999-2000 starters the retention rate was 81 per cent and the achievement rate was 79 per cent. The retention rate for the 2000-01 starters was 80 per cent and 68 per cent have completed the framework. Seven per cent of the 2000-01 starters are still in learning. Of the 78 learners who started in 2001-02, 45 per cent completed the framework and a further 27 per cent are still in learning. Of the 151 who have joined the programme since 2003, over 92 per cent are still in learning. The ESCT learners achieve at a lower rate than the Rolls-Royce apprentices and the rate has steadily declined in the past three years for which data is complete.
- 58. Rolls-Royce and ESCT learners and the provider have achieved awards in a number of national, regional and local competitions. An ESCT apprentice was given an award for the best East Midlands apprentice in 2006. In 2005, a Rolls-Royce advanced apprentice was awarded the apprentice of the year by Derby College. Rolls-Royce was awarded the prestigious national arts, business and employee award and the leadership and industry award for the best supporting company at the national young engineers final.
- 59. Learners develop very good technical and personal skills. First-year learners in the training centre quickly assimilate new skills during their basic training modules. Practical skills development is facilitated and encouraged at all stages of the programme. In all departments, learners take early responsibility for the standard and integrity of their work. Learners are expected to work consistently to the demanding standards of work in the aero-engine industry as members of production teams. Second- and third-year learners, for example are working as fully integrated team members in the aero-engines assembly and production departments units. One second-year apprentice was observed assembling jet engine bleed air pipework systems on production engines. Other learners in technical services are working successfully in teams of professional engineers and technicians. Learners are engaged in technically demanding activities such as weight engineering projects, the application of three-dimensional parametric modelling systems, and the design of data sheets on engine components for display on the intranet. Learners from ESCT are also developing very good skills. One learner in a specialist vehicle body manufacturer is a valued member of a team fabricating a bespoke support trailer for a motor sport team. Another, in a small precision engineering company, has been given early responsibility for CNC machining, including the loading of machining program routines and the production of finished products.
- 60. Progression into employment and posts of responsibility by learners is very good. All Rolls-Royce learners who complete their apprenticeships are employed in the company. Recent first appointments have been as performance technicians, product definition engineers, machinists and fitters. Career advancement for former Rolls-Royce apprentices is good and many progress to become supervisors, departmental managers and, in some cases, directors. The company has a strong tradition of investing in an individual's capability by offering training that includes first and masters degrees. Learners from many ESCT companies are also progressing well to posts of responsibility where they are recognised as valued members of staff.
- 61. Learners make slow progress towards completion of their framework. Of the 68 learners from the 1999-2000 intake, almost 70 per cent completed their framework after

their planned end date and of the 31 completers from the 2000-01 intake, 97 per cent completed later than the planned end date. Only 45 per cent of learners from the 2001-02 intake have completed their framework with 27 per cent still in learning. In most cases, this slow progress is related to late completion of the NVQ at level 3.

The following tables show the achievement and retention rates available up to the time of the inspection.

LSC funded work-based learning																
Advanced	200	5-06	2004-05		2003-04		2002-03		2001-02		2000-01		1999-00			
apprenticeships	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Number of starts	64		53		34		39		78		45	100	86	100		
Retained*	0		0		0		7		58		36	80	70	81		
Successfully completed	0		0		0		7		35		31	69	68	79		
Still in learning	61		48		31		23		21		3	7	1	1		

^{*}retained learners are those who have stayed in learning for at least the planned duration of their training programmes, or have successfully completed their programme within the time allowed

LSC funded work-based learning																
Apprenticeships	200	5-06	200	4-05	200	1-02	200	0-01								
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Number of starts	1	100	1	100	2	100	3	100								
Retained*	0	0	0	0	1	50	0	0								
Successfully completed	0	0	0	0	0	0	0	0								
Still in learning	0	0	0	0	1	50	0	0								

^{*}retained learners are those who have stayed in learning for at least the planned duration of their training programmes, or have successfully completed their programme within the time allowed

LSC funded work-based learning																
NVQ Training	200	3-04	200	2-03	200	1-02										
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Number of starts	1	100	3	100	9	100										
Retained*	0	0	2	67	3	33										
Successfully completed	0	0	2	67	3	33										
Still in learning	0	0	0	0	0	0										

^{*}retained learners are those who have stayed in learning for at least the planned duration of their training programmes, or have successfully completed their programme within the time allowed

The quality of provision

62. Learners benefit from a very good range of additional qualifications and enrichment activities. A wide range of technical certificate courses is available to all learners and include the newly developed foundation degree. Learners also achieve other nationally recognised certificates and some progress to engineering degrees. The company provides an extensive range of in-house training programmes, including three-dimensional computer-aided design and modelling, risk management, slinging and lifting, non-destructive testing and personal development skills. The establishment of the CoVE in lean manufacturing has provided learners with the opportunity to improve their lean

engineering skills and to achieve an NVQ in business improvement techniques. The company strongly encourages and supports learners in education liaison activities, community projects, apprentice association activities and business attachments. The community projects for learners, in particular, are an integral part of Rolls-Royce's community training programmes in the United Kingdom. The projects are very successful in developing the personal, team and project management skills of learners while making a positive contribution to the community. All learners attend a one-week personal development outdoor adventure course during the second year of training. The programme is designed to encourage team working, problem solving and communication skills. Learners speak with enthusiasm and appreciation of this popular programme and its value to them.

- 63. Rolls-Royce has worked very successfully in collaboration with two partner organisations from the arts to facilitate the integration of creativity into the technical and practical skills development of learners. In one project, Rolls-Royce and ViVA, the orchestra of the East Midlands, have developed a unique programme that sets out to embed creative thinking within the first-year apprentice-training programme. Another very successful partnership has been with Tate Liverpool that sets out to redefine and extend current boundaries within engineering apprentice training. Within a business training context, the project has integrated the acquisition of technical skills with personal, critical and creative thinking skills through engagement with the work of artists.
- 64. Training continues to be particularly good, especially the off-the-job training. Learners complete an initial period of basic skills competence training in the Rolls-Royce training workshops, working towards an NVQ at level 2 in performing engineering operations. The well-equipped workshop provides learners with a good introduction to basic fitting, machining and other practical engineering skills. Teaching is good with experienced and well-qualified teachers. Inspectors observed three practical lessons which were all good. Learners are given a range of well-planned practical tasks to increase their skill level and confidence. Individual support is given during practical tasks where exercises allow learners to progress at their own pace and afford good opportunities for learners to practise their new skills. Good emphasis is given to health and safety during all off-the-job training activity. Staff are successful in raising the employability skills and maturity of learners by emphasising the importance of good timekeeping, discipline and respect for others. Learners speak highly of their introductory workshop training and its value in introducing them to modern manufacturing and production procedures. Following their training workshop phase, learners progress onto a very well-planned period of on-the-job training. Learners benefit from good on-the-job training in a wide range of good placements within Rolls-Royce and across the ESCT companies. In the workplace, learners receive good support and guidance from their supervisors and quickly develop as skilled and valued team members. Within Rolls-Royce, learners are on placements in project offices, design offices, manufacturing cells, materials sourcing, engine test-bed facilities and world-class laboratories. Work placements for learners in ESCT companies include rail engineering, specialist motor vehicle coach building, precision CNC machining, engineering component manufacturers, food and beverage producers.
- 65. Learners continue to have good access to the excellent resources which were identified in the June 2002 report. The first-year training centre at Derby is well-furnished with an extensive range of good practical equipment to meet the needs of first-year apprentices in fitting, machining and welding and fabrication. Recent funding through

CoVE status has been well used to further develop these resources as a centre to increase engineering skills and business improvement techniques in lean manufacturing. Throughout training programmes, all learners have good access to a wide variety of learning resources. These include on- and off-the-job attachments, further education courses, specific in-company training courses and distance learning through the Rolls-Royce IT-based learning facilities and learning resources centres at Derby.

- 66. In the workplace, Rolls-Royce learners, in particular, benefit from placements in world-class leading laboratories, design offices, manufacturing cells, modern production lines, maintenance teams, materials sourcing or state-of-the-art engine test-bed facilities. Learners with ESCT companies have access to all of the facilities at the Rolls-Royce training centre, in addition to the good workplace resources in their own companies.
- 67. Since Rolls-Royce took over the ESCT programme it has developed very supportive partnerships with employers, particularly the smaller and medium-sized companies. Rolls-Royce has made very effective use of the regular contact between its training officers and employers to introduce a wide range of business improvement processes and techniques. The support given to employers in topics such as training consultancy, mentor training, NVQ and key skills portfolio compilation is helping employers to improve the management of the on-the-job training of their learners. Rolls-Royce is making very effective use of the CoVE in lean manufacturing to bring about business improvements in the ESCT companies. Additional support includes direct assistance from Rolls-Royce purchasing teams and delivering NVQs in business improvement techniques. Rolls-Royce has made intensive efforts to support learners and their employers in a small number of companies that have been forced to close down because of major shutdowns by their customers. Rolls-Royce has provided significant support for redundant learners and their employers with job searching and curriculum vitae production.
- 68. The quality of information, advice and guidance provided to learners at the start of their programmes is satisfactory.
- 69. The arrangements for providing additional learning support for learners are satisfactory. Learners have their literacy and numeracy needs assessed at induction using a series of standard assessment papers. The results enable Rolls-Royce to highlight specific learning needs and to create an appropriate action plan when required. Entry selection standards are high for advanced apprentices and most learners have high grades in GCSEs and some have A-levels in mathematics, physics and IT. Very few learners require any additional support in literacy, numeracy and language. Of the 60 learners recruited in 2005-06, only three needed additional support. When a learner is identified as needing additional assistance, it is readily made available and, if necessary, external specialist support is provided, for example for learners with dyslexia. Rolls-Royce has well-qualified staff who can provide specialist support for learners in a range of subjects.
- 70. Progress reviews were reported as insufficiently thorough at the previous inspection and they remain weak. Learners' progress is still not effectively monitored or recorded. The period between progress reviews is between eight and 12 weeks. Where targets are set they do not challenge learners to achieve more quickly and, in most cases, there has been a lack of attention to aspects of the framework other than the main NVQ. Action plans do not have clear short-term targets including references to the achievement of key skills. Actions identified in the plans are often very general and do not include precise

targets. Aspects of equality and health and safety are given cursory attention or not discussed at all at some reviews.

71. At the previous inspection, internal verification was weak. Some aspects of internal verification continue to be weak. While the portfolios for the NVQ at level 2 and practical work are internally verified to a satisfactory standard, the portfolios for the NVQ at level 3 and key skills are still not monitored by an internal verifier until all the units have been completed. This continues to create delays in certification and does not provide internal verifiers with regular feedback on the learners and assessors. Formal meetings between assessors and internal verifiers have still not taken place. More comprehensive assessment and verification plans have recently been produced which are available electronically. Early indications are that they are improving the arrangements for internal verification.

Leadership and management

- 72. Day-to-day management of the off-the-job training programmes is good with effective use of resources. Training staff are well motivated and are committed to their roles within Rolls-Royce and with employers. Staff are fully aware of their roles and responsibilities. Internal communications are good with staff meetings being held every four weeks. Management puts a high priority on staff development. Staff are encouraged and supported to broaden their technical and teaching skills. Recent staff development activities include health and safety and the updating of assessor awards.
- 73. Planning of the apprenticeship programme is satisfactory. Targets for framework completion are set and reviewed at management meetings. However, there are weak aspects in the management of the internal verification system in the workplace for the NVQ at level 3 and key skills. Learners demonstrate a satisfactory understanding of equality of opportunity. Nevertheless, ineffective use is made of progress reviews to reinforce equality of opportunity in the workplace.
- 74. Staff give the maintenance of good standards of health and safety a high priority, particularly in the training centre. Comprehensive risk assessments are carried out and safety checks are regularly audited. The training workshops are clean, tidy and provide safe working environments with appropriate machine guards and emergency cut-outs in place. Generally, the standards in the workplace are also high but inspectors did identify one location with less than satisfactory arrangements which had not been reported during review visits.
- 75. The self-assessment report is insufficiently critical and does not identify any weaknesses in the area of learning. Some of the strengths in the report matched those identified by inspectors, but three weaknesses from the previous inspection still exist.