The Education and Training Inspectorate - Promoting Improvement

Providing Inspection Services for
Department of Education
Department for Employment and Learning
Department of Culture, Arts and Leisure

CUSTOMER SERVICE EXCELLENCE

INVESTOR IN PEOPLE

Education and Training Inspectorate

Report of an Inspection

Jobskills Provision
Engineering Training Council Northern Ireland

Inspected: November 2006

CONTENTS

Section		Page
SUMMARY		
1.	CONTEXT	1
2.	PROVISION	1
3.	THE INSPECTION	2
4.	MAIN FINDINGS	2
OVERALL QUALITY OF PROVISION		
5.	STANDARDS AND OUTCOMES	4
6.	LEARNING AND TRAINING	5
7.	LEADERSHIP AND MANAGEMENT	6
KEY PRIORITIES FOR DEVELOPMENT		
	APPENDIX	

A number of quantitative terms are used in the report. In percentages, the terms correspond as follows:

More than 90%	-	almost/nearly all
75%-90%	-	most
50%-74%	-	a majority
30%-49%	-	a significant minority
10%-29%	-	a minority
Less than 10%	-	very few/a small minority

The statistics used in this report have been supplied and verified by Engineering Training Services.

Grading System

The Education and Training Inspectorate (Inspectorate) is piloting a new 6-point grading scale to replace the original 4-point scale as set out below. Where grades are recorded in this report, the grade is given on both the old and the revised scales.

ORIGINAL GRADE	REVISED GRADE	DESCRIPTOR
1	1	Outstanding; characterised by excellence.
1	2	Consistently good; major strengths.
2	3	Important strengths in most of provision. Areas for improvement which organisation has the capacity to address.
2	4	Overall sound/satisfactory but with areas for improvement in important areas which need to be addressed.
3	5	A few strengths; significant areas for improvement which require prompt action.
4	6	Poor; major shortcomings which require urgent action.

SUMMARY

1. CONTEXT

1.1 The Engineering Training Council Northern Ireland (ETCNI) is an employer-led sectoral body for the engineering industry within Northern Ireland (NI). It is also a local representative of the United Kingdom (UK) Sector Skills Council, Science, Engineering, and Manufacturing Technologies Alliance (SEMTA). The Engineering Training Council is contracted by the Department for Employment and Learning (DEL) to supply training for the Jobskills programme. A subsidiary company of ETCNI, Engineering Training Services (ETS) manages its Jobskills programme. Engineering Training Services has developed partnerships with approximately 60 employers across NI to assist them in their recruitment of engineering apprentices and in the management of their apprentice-training programme, through the Jobskills Modern Apprenticeship (MA) programme. Engineering Training Services is located within the Engineering Training Council's offices at Interpoint, York Street, Belfast.

1.2 The majority of Modern Apprentices (apprentices) progress from post-16 further education engineering courses or from Jobskills Traineeship programmes, and the remainder from post-primary schools, across NI. Most enter the MA programme with at least four General Certificates in Secondary Education (GCSE) at grade C or above.

2. PROVISION

2.1 The employers, through Engineering Training Services, offer MA across a range of specialist areas within engineering, which include mechanical engineering, electrical and electronic engineering, fabrication and welding engineering, technical services, and maintenance engineering. Over the last three years recruitment has been steady, with an average of 86 new registrations each year. At the time of the inspection, there were a total of 213 young people registered on a MA programme. Approximately 82% were male. Twenty-five percent of these apprentices were specialising in mechanical engineering, 25% in electrical and electronic engineering, 22% in fabrication and welding engineering, 20% in maintenance engineering, and the remaining 8% in technical services. All apprentices target a relevant level 3 National Qualification Vocational (NVQ), a framework of key skills, and a relevant technical certificate, for their MA qualification. The apprentices also complete a level 2 NVQ as an interim qualification.

2.2 All the MA are recruited and employed as craft or technician apprentices by companies across NI. The companies provide the apprentices with on-the-job practical training on their own premises. A minority also provide a programme of off-the-job practical training in their own training facilities or is sub-contracted to other training providers. Most companies arrange for their apprentices to attend a local college of further and higher education one day each week to complete an appropriate technical certificate, such as an Edexcel National Certificate or a City and Guilds 2800 Certificate, for their qualification.
Engineering Training Services manage the monitoring and assessment of the apprentices' progress and achievements, mainly through company-based assessors and ETS internal verifiers. They also facilitate the assessment for the accreditation of the apprentices' key skills.

3. THE INSPECTION

3.1 This report is based on an inspection of the trainees' practical and written work, and of the their college-based and work-based training programmes. The inspection focused on 19 of the 66 companies providing the MA programmes through ETS. This represented 80% of the apprentices registered at the time of the inspection. The area of preparation for life and work, which includes the key skills provision, apprentice support and careers education, information advice and guidance (CEIAG), was also inspected.

3.2 During the inspection, a team of inspectors observed 49 trainees in eleven directed training sessions and visited 33 trainees in the workplace. Discussions were held with the Chief Executive and training officers of ETS, college lecturers, employers, and apprentices. Samples of the trainees' work, vocational and essential skills portfolios, internal and external verifier reports, and other relevant documentation were examined.

4. MAIN FINDINGS

4.1 In the areas inspected, the organisation has strengths in key aspects of its educational and training provision. The inspection has identified areas for improvement in important aspects of provision, which need to be addressed to meet effectively the needs of all the learners, and the needs of the community and the economy.

The Education and Training Inspectorate (Inspectorate) will monitor and report on the organisation's progress in addressing these areas for improvement.

4.2 The main strengths are the:

- standards of practical work and technical knowledge demonstrated by almost all of the apprentices;
- high success rate of apprentices, out of those who complete their planned training programme, achieving their MA;
- quality of the work-based training provided by most employers; and
- hard-working staff and management in developing and managing effective links and partnerships with employers.

4.3 The main areas for improvement are the:

- retention rate of apprentices remaining on their training programme;
- key skills provision for a significant minority of apprentices;
- arrangements to ensure regular monitoring, reviewing and assessing of the apprentices' progress and achievements, including internal verification;
- policy and procedures for effective pastoral care, and (CEIAG) provision for all apprentices;

- quality assurance arrangements to promote improvement, particularly within the key skills provision;

GRADES

Provision	**Overall**	
	No of trainees	**Grade**
	213	**4**
Contributory Grades:		
Standards and Outcomes		4
Learning and Training		4
Leadership & Management		4

Areas of Learning	**No of trainees**	**Grade**
Engineering	213	4
Preparation for Life & Work	213	5
Contributory grades:		
Literacy – Key Skills	ALL	5
Numeracy – Key Skills	ALL	5
Apprentice Support	All	4
Careers Education, Information, Advice and Guidance (CEIAG)	All	5

OVERALL QUALITY OF PROVISION

5. STANDARDS AND OUTCOMES

5.1 Almost all of the apprentices demonstrate good patterns of attendance and timekeeping to their employment and to their further education course, and are committed to achieving their MA qualification. They work well as part of a team or independently, and have established good relationships with their colleagues, tutors and workplace supervisors.

5.2 The standards of the practical work demonstrated in the workplace by almost all of the apprentices are excellent. The apprentices develop a good range of practical skills to industry standards, which they are able to perform efficiently and effectively with minimal supervision. These skills include the precision manufacturing of engineering components using modern machine tools; the fabrication, welding and assembling of complex steel assemblies using industry standard techniques; the construction of electrical/electronic control panels; the repair and routine maintenance of machinery and process manufacturing systems; and the production of technical drawings using computer-aided drafting (CAD) systems.

5.3 The standards of almost all of the apprentices' technical knowledge relating to their practical work are at least good. They develop a good understanding of related engineering principles, of proprieties of engineering materials, and of manufacturing techniques and processes relating to their specialist area. In the workplace, the apprentices are able to use and apply effectively their technical knowledge to complete practical tasks. During the inspection, for example, apprentices were observed in the workplace fault-finding and solving engineering problems, interpreting detail electrical schematics to construct complex wiring circuits, selecting correct tools and speeds/feeds to operate machine tools, and using precision measuring equipment to accurately check dimensions.

5.4 The majority of the apprentices develop their communication and numeracy skills to at least a suitable level to carry out their practical tasks competently. Their oral skills are well-developed, enabling them to communicate clearly and effectively with colleagues, supervisors and customers. Their skills in reading and interpreting technical drawings and information sheets are effective. Their numeracy skills in measurement and performing basic arithmetic functions are secure. For a significant minority, their Information and Communication Technology (ICT) skills are also good, and range from basic word processing and Internet searches to advanced use of computer-aided systems for engineering design and manufacture. There are, however, a significant minority of apprentices who do not develop their key skills to the level of which they are capable.

5.5 Over the period from 2001/02 to 2003/04, of the 264 apprentices who started the MA programme, 113 completed the programme and 109 gained the full award. Taking into consideration the 70 still on training at the time of the inspection, these figures represent a satisfactory retention rate of 70%, and an excellent success rate of 97% for those who completed their programme. Progression, for apprentices who successfully completed their Modern Apprenticeship, to employment as a craft or as a technician engineer is excellent at over 90%.

6. TRAINING AND LEARNING

6.1 The selection and induction programmes are effective for the majority of the apprentices. Engineering Training Services carry out an initial assessment of prospective apprentices' aptitude to engineering, and provide results to most employers to assist them in their selection of suitable apprentices. For apprentices employed by large to medium sized employers, which represent the majority of the apprentices, the induction they receive is good. They are provided with good quality information regarding the structure and content of their apprenticeship programme, and a period of off-the-job training to develop their skills in the safe use of tools and equipment. The induction provided for apprentices employed by small employers, however, is limited. The apprentices are provided only with information relating to the structure of their NVQ. There is a need to provide the apprentices with more guidance and practice relating to the development of their key skills, and with a structured programme of practical skills training in the safe use of tools and equipment.

6.2 The quality of on-the-job training, for most apprentices, ranges from satisfactory to excellent, and is mainly good. The apprentices are provided with good opportunities to develop their occupational skills and knowledge to industry standards. Where on-the-job training is excellent, the employers rotate the apprentices around the various sections of the company, providing them with excellent opportunities to develop a wide range of skills and knowledge. These apprentices are also provided with high levels of pastoral and training support. Work-based mentors manage the apprentices' workplace experiences to ensure that they engage in appropriate range of practical tasks; make good progress in achieving their NVQ; and develop their wider skills of working with others, of improving their own performance, and of problem solving. For a minority of apprentices, the planning of work-based training, the monitoring and reviewing of progress and achievements, and the tracking of assessment is, however, limited.

6.3 The quality of the provision to develop the apprentices' key skills of application of number, communication and ICT skills is variable. The majority of the apprentices enter the MA with level 2 qualifications in English and mathematics. These apprentices have good opportunities for further development and use of their key skills throughout their directed and work-based training. The provision for a significant minority of apprentices with low entry levels of attainment in English, mathematics and/or ICT has, significant shortcomings. These include the need for robust diagnostic testing to identify accurately each apprentice's areas of weaknesses in their key skills, the subsequent preparation of an effective programme to address these weaknesses, and a well-managed assessment plan.

6.4 The quality of vocational training support provided for apprentices in the workplace and during directed training is good. Workplace supervisors and college lecturers provide high levels of individual support for each apprentice to ensure they achieve high standards in their work.

6.5 The arrangements for CEIAG are insufficient. There are no policy or procedures in place to ensure that all apprentices are provided with a structured provision to inform and guide their career choices and progression pathways within further and higher education.

7. LEADERSHIP AND MANAGEMENT

7.1 The quality of the management and coordination of the training provision provided by ETS is good. The Chief Executive provides very good strategic leadership to ensure that the apprentice-training programme offered by ETS meets the needs of employers and supports economic development. The Chief Executive, through working groups involving a range of stakeholders, is also active in promoting and developing education and training provision for engineering within schools, colleges, and employer-led programmes.

7.2 The ETS training officers, who manage and coordinate the MA programme, work hard and are committed to providing a programme that meets the needs of the engineering industry. As a result, they develop effective links and partnerships with a good range of employers across NI.

7.3 The arrangements to ensure regular monitoring, reviewing and assessing of apprentices' progress and achievements are weak. There is no effective system in place to quality assure the various apprentice review systems operated by employers participating in the MA programme.

7.4 The arrangements for the protection and of children and vulnerable adults are unsatisfactory. At the time of the inspection, ETS had no policies or procedures in place to ensure that they met the requirements of the Protection of Children and Vulnerable Adults (NI) Order 2003.

7.5 The quality of the self-evaluation report and development plan has some strengths, including the effective use of apprentice questionnaires and the MA employer forum to inform action for improvement. There are, however, important shortcomings. These shortcomings include the rigorous analysis of data to inform the key performance indicators of attendance, retention and success; the evaluation of the quality of the training and learning across all aspects of the programme, particularly of the key skills provision; and the monitoring of the effectiveness of the development plan to promote improvement.

KEY PRIORITIES FOR DEVELOPMENT

Engineering Training Services needs to revise its annual development plan to take account of the following key priorities:

- the provision of suitable support for all apprentices to develop effectively their key skills;
- the development and implementation of effective policies and procedures for the protection of children and vulnerable adults;
- the effective use of data to track and monitor apprentice progress and achievements, and to inform and review action to improve retention;
- the provision of CEIAG for all apprentices.

APPENDIX

JOBSKILLS MODERN APPRENTICESHIP

Year	**Started (completed 4 weeks)**	**Retention Rate %**	**Success Rate %**	**Progressed to relevant employment %**
2001/2002	100	65	98	100
2002/2003	73	64	93	100
2003/2004	90	77	-	-
	Average	**70**	**97**	**100**

2004/05 – 63 trainees still on training
2005/06 – 78 trainees still on training

Copies of this report are available on the DE website: www.deni.gov.uk or may be obtained from the Inspection Services Branch, Department of Education, Rathgael House, 43 Balloo Road, Bangor, Co Down BT19 7PR.