

### **13. CONSTRUCTION (Brickwork, Plumbing, Carpentry and Joinery)**

**Performance Level:** Very Good

**Areas inspected: Work-Based Learning Provision in:**

- Trowel Occupations (Brickwork);
- Mechanical Engineering Services (Plumbing); and
- Wood Occupations.

#### **CONTEXT**

13.1 At the time of the inspection, 247 learners were registered on the Training for Success and ApprenticeshipsNI programmes; 26 in brickwork, 147 in wood occupations and 74 in plumbing. The recruitment to the bricklaying, plumbing and wood occupations programmes has been adversely affected by the economic downturn. In the past four years, the overall recruitment has decreased by approximately 50% in both wood occupations and plumbing, and by almost 66% in brickwork.

**The quality of leadership and management is very good.**

13.2 The quality of the leadership and management is very good. The head of school and deputy head of school have worked hard to develop an appropriate curriculum to meet the traditional skills needs, but also the emerging skills needs in sustainable and renewable technologies. There are clear lines of communication between the course co-ordinators and the head and deputy head of school, and the programmes are well-managed and organised across the campuses in Armagh, Newry and Portadown.

13.3 Staff in the school's 'GreenTec' Sustainable Building Technology Centre have made very good progress in developing links with industry. The two research lecturers facilitate and deliver a range of training programmes in renewable and sustainable technologies for staff and learners. Currently, they are at an advanced stage in the development of a range of industry-relevant additional qualifications which will be offered to the level 2 and 3 learners. Two lecturers have also recently availed of the opportunity to gain experience of sustainable and renewable technologies through the College Industry Initiative.

13.4 The arrangements for self-evaluation and improvement planning at school level are very good. Management information is collated and analysed regularly and used effectively to identify areas for improvement. The performance enhancement programme and the self-evaluation process have appropriately identified the low outcomes on the plumbing programmes and, as a result, an appropriate action plan for improvement has been implemented. The actions to date have resulted in improved retention rates on the Programme-Led Apprenticeship provision. Although there is effective tracking of the learners' progress, the processes could be developed further by the wider use of the online group tracking sheet that is being piloted in plumbing.

13.5 The construction programmes are well-resourced. The College has made a significant investment in staffing, resources, minibuses and accommodation to support the skills enhancement programme for the minority of the learners who are not in a work placement.

**The quality of the provision for learning is very good.**

13.6 Across the provision, the quality of most of the teaching, training and learning is good or better; a minority is very good or better. All of the observed sessions in brickwork and plumbing were good or better, and two-thirds were good or better in wood occupations. The more effective sessions were characterised by a wide range of active learning approaches to extend and reinforce learning, effective questioning techniques to develop the learners' thinking skills, a good balance of theory and practical work and relevant careers advice and guidance to engage the learners. In the less effective sessions, there were limited opportunities for the learners to engage actively in their learning or sufficient use of ILT to enhance learning and assessment. While the learners receive effective feedback on how to improve their practical skills, the use of marking for improvement in their theory work is underdeveloped. The learners benefit from good opportunities to participate in regional and national competitions, which significantly enhance their technical and employability skills. They are also supported to achieve additional qualifications such as the construction skills register card and the Oil Firing Technical Association certification to install and commission unvented hot water systems. It is noteworthy that most (82%) of the learners are in a work placement; the placement rates are particularly high in plumbing and wood occupations. The monitoring placement officers and the lecturers have engaged well with employers to source and sustain appropriate work placements.

13.7 For those learners who are not in a work placement, there is a well-embedded skills enhancement programme which is developing their technical and employability skills. The programme also incorporates a personal and social development aspect which promotes well the learners' citizenship and social responsibility skills through participation in community and voluntary projects. The provision could be enhanced further by the implementation of a structured programme of guest speakers and industrial visits to develop further the learners' understanding of new technologies and practices, and to raise their motivation and enthusiasm.

13.8 The quality of the personal training plans is good. The learners have regular reviews by the monitoring and placement officers both in the College and in the workplace. The learners' progress and achievements are tracked and recorded systematically, and appropriate training and assessment targets are set. The monitoring placement officers provide very good support for the learners.

### **Achievements and standards are good.**

13.9 The College promotes high occupational standards through the participation of the learners in relevant competitions including the regional and national Skill Build competitions, where the College has a strong track record of success. The lecturers promote and expect high standards of work, including adherence to stringent standards of health and safety. Overall, the occupational standards developed by most of the learners are good. They work well independently and in groups, and are making good progress in their courses; they demonstrate very good levels of competence in their professional and technical areas. In brickwork, most of the learners are developing good skills in laying brick walls and using a range of bonds to appropriate tolerances in line and level. In wood occupations, they are making very good progress in constructing stud walls, drawing to scale and manufacturing joints using hand and power tools. In plumbing, most of the learners are making very good progress in the installation and decommissioning of hot water systems and soldering and bending pipe to acceptable tolerances. In addition, the learners are developing good spoken communication skills; they use an appropriate range of technical language and speak confidently and competently with their peers, lecturers and workplace supervisors. The opportunities, however, for the learners to develop their extended writing skills are underdeveloped.

13.10 Overall, over the past four years, a majority of the learners in the construction trades are retained and almost of these achieve. More work is necessary to ensure that retention rates continue to improve and are monitored closely. Progression rates are very high for those who achieve.

**Table of Achievements**

<b>Programme/Strand</b>	<b>Numbers registered who completed 4 weeks training</b>	<b>Retention rate %</b>	<b>Achievement rate %</b>	<b>Progression rate for those who achieved full award %</b>
<b>Bricklaying ( Trowel Occupations)</b>				
Skills for Work	72	82	100	88
Programme-Led Apprenticeships	68	47	81	100
ApprenticeshipsNI Level 2	11	73	88	100
ApprenticeshipsNI Level 3	29	69	95	100
Overall	180	66	93	94
<b>Mechanical engineering services (plumbing)</b>				
Programme-Led Apprenticeships	119	64	88	86
ApprenticeshipsNI Level 2	44	82	92	91
Overall	163	69	89	88
<b>Wood Occupations</b>				
Skills for Work	156	76	97	91
Programme-Led Apprenticeships	234	55	94	84
ApprenticeshipsNI Level 2	47	64	100	97
ApprenticeshipsNI Level 3	117	79	84	97
Overall	554	67	93	91