

9. APPLIED SCIENCE

Performance Level: Good

Areas Inspected: Further Education Provision in:

- Full-time level 2 and level 3 applied science courses.

CONTEXT

9.1 The College provides the BTEC extended level 3 diploma in applied science in the Armagh, Newry and Portadown campuses. It has also commenced this year a BTEC level 2 diploma in applied science which is delivered in the Portadown campus. At the time of the inspection, 57 learners were enrolled on the first year of the level 3 course, and 30 on the second year. A total of 13 learners were enrolled on the level 2 course.

The quality of leadership and management is very good.

9.2 The head of school and the deputy head of school provide effective leadership. There are clear lines of communication between the course co-ordinators and the head and deputy head of school, and all of the programmes are well-managed and organised across the three campuses. The processes for self-evaluation in conjunction with the recently initiated performance enhancement programme are very good. The improvement planning has identified key areas for development in standards and achievements, learning and teaching and the curriculum provision. Significant actions to bring about improvement in these areas have been implemented with success to date and need to be monitored to ensure improvements are sustained. These include the development of the level 2 applied science course to address the learners' skill gaps in working in a laboratory environment, a rigorous evaluation of assessment planning through assignment workshops, and a review of assignment briefs by the school-based research lecturer to ensure that they are aligned to local industry standards and training needs. Economic engagement is very good. The College is at an advanced stage in the development of a higher apprenticeship framework with two of the region's largest pharmaceutical employers who are directly involved in the design and curriculum delivery of this new programme.

The quality of the provision for learning is good.

9.3 In the lessons observed, the planning, teaching, learning and assessment ranged from very good to satisfactory. Almost all (91%) of the lessons were good or better; a minority were very good. In the most effective practice, the lessons were characterised by: high expectations; the selection and use of appropriate teaching strategies including ILT to meet the range of learning styles in the class; well-planned practical work, building on prior learning experiences; relevant links to industry and career progression pathways; and effective questioning which promoted the learners' thinking skills. In the less effective practice, there was an over-emphasis on whole-class activities which lacked pace and challenge and did not take account of the range of abilities within the class, or develop sufficiently thinking skills and independence in learning.

Achievements and standards are good.

9.4 The learners are confident and well-disposed towards learning. They approach their work positively and when given the opportunity, in a majority of sessions, work well in groups and are able to talk about what they learn with a high degree of confidence. In the practical classes observed, the experimental work was performed accurately and competently to a high standard. In titration experiments, the learners made measurements to a high degree

of precision and accuracy and clearly displayed and presented their results to an appropriate and consistent number of significant figures with units indicated and using a table where necessary. Over the past three years, the overall retention rate is very good at 92% and the achievement rate is satisfactory at 78%. The staff have benefited from the feedback by the Teaching and Learning Advisers on the quality and impact of their teaching and learning and there are appropriate action plans in place to support effective classroom practice and improve further the standards achieved by the learners.

Table of Achievements

Course Type	Completion Year 2010/11			Completion Year 2011/12			Completion Year 2012/13			Three Year Average		
	Ret (%)	Ach (%)	Succ (%)	Ret (%)	Ach (%)	Succ (%)	Ret (%)	Ach (%)	Succ (%)	Ret (%)	Ach (%)	Succ (%)
Full-time Courses at Level 3	93	63	59	97	87	84	86	81	70	92	78	72
Overall	93	63	59	97	87	84	86	81	70	92	78	72