Isle of Wight College Reinspection of Science and Mathematics: March 2001 Report from the Inspectorate The Further Education Funding Council

### THE FURTHER EDUCATION FUNDING COUNCIL

The Further Education Funding Council (FEFC) has a legal duty to make sure further education in England is properly assessed. The FEFC's inspectorate inspects and reports on each college of further education according to a four-year cycle. It also assesses and reports nationally on the curriculum, disseminates good practice and advises the FEFC's quality assessment committee.

#### REINSPECTION

The FEFC has agreed that colleges with provision judged by the inspectorate to be less than satisfactory or poor (grade 4 or 5) should be reinspected. In these circumstances, a college may have its funding agreement with the FEFC qualified to prevent it increasing the number of new students in an unsatisfactory curriculum area until the FEFC is satisfied that weaknesses have been addressed.

Satisfactory provision may also be reinspected if actions have been taken to improve quality and the college's existing inspection grade is the only factor which prevents it from meeting the criteria for FEFC accreditation.

Reinspections are carried out in accordance with the framework and guidelines described in Council Circulars 97/12, 97/13 and 97/22. Reinspections seek to validate the data and judgements provided by colleges in self-assessment reports and confirm that actions taken as a result of previous inspection have improved the quality of provision. They involve full-time inspectors and registered part-time inspectors who have knowledge of, and experience in, the work they inspect. The opinion of the FEFC's audit service contributes to inspectorate judgements about governance and management.

## **GRADE DESCRIPTORS**

Assessments use grades on a five-point scale to summarise the balance between strengths and weaknesses. The descriptors for the grades are:

- grade 1 outstanding provision which has many strengths and few weaknesses
- grade 2 good provision in which the strengths clearly outweigh the weaknesses
- grade 3 satisfactory provision with strengths but also some weaknesses
- grade 4 less than satisfactory provision in which weaknesses clearly outweigh the
- grade 5 poor provision which has few strengths and many weaknesses.

Audit conclusions are expressed as good, adequate or weak.

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# Isle of Wight College South East Region

Reinspection of science and mathematics: March 2001

## **Background**

The college was inspected in February 1999 and the findings published in inspection report 52/99. Provision in science, mathematics and computing was awarded a grade 4. The key strength was effective use of practical work. Provision in computing was judged satisfactory. The major weaknesses in science and mathematics were: the failure of a significant number of lessons to make appropriate demands on students; very poor retention and achievement rates for students on GCE A level courses; achievements below the national average on GCSE courses; and inadequate procedures for risk assessment. Science and mathematics provision was reinspected in March 2000 and the report published on the FEFC's website. While some progress had been made to address weaknesses, teaching standards remained well below the national average, retention and pass rates on GCE A level courses were also poor and students' attendance in classes was below the national average. The provision was judged to be still unsatisfactory.

A second reinspection took place in March 2001. The college had ceased to offer some GCE A level science courses. Inspectors assessed progress on GCSE courses in mathematics and science, GCE A level human biology and the national diploma in science (sports science). Inspectors observed 8 lessons, examined a range of documents and students' marked work, scrutinised students' achievement and retention data, and had meetings with managers, teachers and support staff.

### Assessment

The college has made some progress in addressing the weaknesses identified at the last reinspection. The college has reviewed its GCE A level provision and in September 2000 poorly performing courses in mathematics, chemistry, physics and biology were discontinued. GCE A level human biology has been retained. GCSE courses in chemistry, physics and biology have been replaced with the GCSE in integrated science and GCSE human biology continues to be offered. A pre-GCSE course in mathematics has been introduced. Provision in science and mathematics now mainly supports other qualifications and programmes. Teachers make good use of learning resources developed with the help of the standards fund. However, there has been a reduction in the number of hours devoted to teaching GCE A level subjects. Although teachers try to ensure students make good use of the time allocated for study in the learning resource centre, the three hours allocated for direct teaching is low, when there are new specifications to be established, and materials for independent study are still being developed.

In mathematics, teachers use effectively both IT and more traditional teaching methods to teach groups of students of varying ability and different ages. The facilities in the mathematics area of the college, when not used for lessons, are available for students to use as 'drop-in' workshops and teachers are available to help students. Most schemes of work are good. However, some lesson plans in both science and mathematics pay insufficient attention to the learning needs of the least able students. The quality of teaching and learning has improved since the last reinspection, and there were no unsatisfactory lessons, but the proportion of lessons considered good or outstanding still remains below the national average for the programme area.

Recruitment of students to courses is now monitored carefully and students' prior qualifications are taken into account more rigorously. The tutorial system has been strengthened. Students who are considered 'at risk' of withdrawing from courses are identified and monitored. Students are set individual targets, which helps to motivate them and clarify teachers' expectations of their students. These developments are having some impact on student retention rates. For example, student retention in March 2001, compared with the same time in 2000, has improved by five percentage points. Attendance in the lessons observed was 74% and while this is an improvement it remains just below the national average of 77% for the programme area. The pass rate of 41% in GCSE mathematics is 2% above the national average, and in GCSE human biology, 5%. The national pass rates in general further education colleges are low. Retention rates for mathematics have not changed significantly and remain just below the national average. Retention rates for GCSE and GCE A level human biology have improved since the reinspection, but also remain below the national average. Pass rates in GCE A level human biology have fallen to below the national average. Of the 24 students taking this subject in 2000, only 13 completed the course, although they all achieved grades A to C. Retention on the national diploma in sports science has declined but remains at the national average. The pass rate has also fallen and is now well below the national average. The college did not recruit students to the course in September 2001 and is considering various options for providing courses in this area.

The college has made some improvements in addressing weaknesses identified at the last reinspection, but has ceased to offer most of its science courses. Provision in mathematics is now satisfactory. Despite some improvement, performance in science subjects generally remains below national averages.

In order to improve further, the college should: continue to explore best practice; strengthen methods for teaching and learning; pay particular attention to the needs of weaker students; explore carefully the reasons why students fail to complete courses; and keep the portfolio of courses in this area under review.

**Revised grade:** science and mathematics 4.