

Wirral Metropolitan College
Reinspection of Mathematics and Science: November 2000
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 strengths*
- *grade 5 - poor provision which has few strengths and many weaknesses.*

Audit conclusions are expressed as good, adequate or weak.

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Wirral Metropolitan College North West Region

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Background

Wirral Metropolitan College was inspected in March 1999 and the findings were published in inspection report 69/99. Provision in mathematics and science was graded 4.

The key strengths were: a broad range of provision; good practical and analytical skills amongst advanced and higher level science students; and well-equipped mathematics workshops. The weaknesses were: a narrow range of approaches to teaching and learning; poor levels of retention and achievement on some courses; inadequate arrangements to manage mathematics provision; underdeveloped internal verification procedures; insufficient use of IT; and a lack of appropriate resources for some courses.

The provision was reinspected over four days in November 2000. Inspectors observed 13 lessons and one tutorial and held meetings with managers, teachers and students. They examined students' work, reviewed data on students' achievements for 1998 to 2000 and scrutinised a wide range of college documents.

Assessment

The quality of teaching and learning has improved significantly. Inspectors judged 61% of lessons to be good. This matches the national average for the programme area and compares well with the 53% of lessons assessed as good or outstanding at the last inspection. All teachers prepare detailed lesson plans with clearly identified learning objectives, which they monitor. In the better lessons, students were engaged in a range of appropriate learning tasks. In one lesson, students worked in small groups discussing the results of food tests before presenting their results to the class. At an outreach centre, students used the same mathematics learning materials as used in similar lessons on the main sites. They were encouraged to join appropriate main site lessons whenever they were unable to attend their evening outreach class. There is good emphasis on safety in practical lessons. Poor punctuality and attendance is challenged. Attendance has improved to 70%, though this is still below the national average of 77% for this programme area. The average class size of 9.3 remains below the appropriate national average. Some lessons still lack the variety of teaching and learning activities to meet all students' needs.

Strategies have been put in place to improve retention and achievement, including adjustments to the range of courses, an effective tutorial system, appropriate entry qualifications for advanced students, close liaison between personal tutors and subject teachers and whole-class teaching of mathematics for younger students where appropriate. Pass rates have improved in GCSE mathematics and some science subjects but the new strategies have not been in place long enough to make an impact on retention and pass rates on some two-year science programmes. In 1999-2000, pass rates in GCSE mathematics, biology and chemistry were significantly above the national average. In the same year, pass rates in GCE A level biology fell below the national average for the first time, while those in GCE A level physics and chemistry remained well below.

The quantity and quality of specialist and learning resources is much improved. Students make increased use of computers and use new mathematical software packages. Some

student assignments have been changed to require students to use IT as part of their key skills development. Advanced mathematics students use graphical calculators. In library areas, students have good access to on-line journals, video, CD-ROMs and past examination papers as well as the Internet. The IT manager has designed a staff development programme to help teachers to use IT in lessons.

The college offers a broad range of both vocational and academic science courses from GCSE and Edexcel first certificate to degree level. It has recently introduced one-year GCE AS qualifications in mathematics and sciences and discontinued the one-year GCE A level provision. Course management, particularly in mathematics, has greatly improved as a result of effective leadership, regular course team meetings, which are attended by part-time as well as full-time teachers, and the development of comprehensive course files and schemes of work. All students are set homework regularly and this is carefully marked with feedback given. Internal verification, where needed, has been introduced and approved by the awarding bodies.

Revised grade: mathematics and science 3.