Subject Inspection of Mathematics
REPORT

Mulroy College
Milford, County Donegal
Roll number: 71220O

Date of inspection: 29 March 2011
REPORT
ON
THE QUALITY OF LEARNING AND TEACHING IN MATHEMATICS

INFORMATION ON THE INSPECTION

<table>
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<th>Dates of inspection</th>
<th>28, 29 March 2011</th>
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<td>Inspection activities undertaken</td>
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<tr>
<td>• Review of relevant documents</td>
<td>• Observation of teaching and learning during seven class periods</td>
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<td>• Discussion with principal and teachers</td>
<td>• Examination of students’ work</td>
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<td>• Interaction with students</td>
<td>• Feedback to principal and teachers</td>
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MAIN FINDINGS

• The good use of ICT in most lessons observed often facilitated the relating of lesson content to real life and to students’ own experiences.

• Classroom management was good and students were kept on task in almost all lessons. Mutual respect between teachers and students was observed and students’ efforts were affirmed.

• Provision for Mathematics is good. Its time allocation is good, although scheduling of fifth and sixth-year classes is unsatisfactory and does not facilitate daily progress. The school has recently adopted the good practice of teaching first-year classes as mixed-ability groups.

• The quality of planning and preparation in Mathematics is very good. A subject department structure is in place and the co-ordinator role rotates every two years.

• Schemes of work have been prepared in terms of learning outcomes for students and linked to specified resources, ensuring they are working documents used to inform teaching and learning.

MAIN RECOMMENDATIONS

• Care needs to be taken to ensure that work planned, and the pace at which it is covered, provides an appropriate challenge for better-able students.

• Questioning needs to focus more on individual students as a means of checking their understanding and learning.

• JCSP students are currently not retested to ascertain progress in Mathematics. This should be addressed, in line with DEIS requirements.

• Subject meetings should include time for the sharing of experiences on methodologies and associated classroom resources.
INTRODUCTION
Mulroy College is a co-educational school under the auspices of County Donegal Vocational Educational Committee and has a current enrolment of 324 students. The school participates in Delivering Equality of Opportunity in Schools (DEIS) and offers a full range of junior and senior cycle programmes. It offers an optional Transition Year (TY) programme.

TEACHING AND LEARNING
- The quality of teaching and learning varied significantly in lessons visited, but was of an overall good standard. Teachers were prepared for lessons and supported learning through the use of digital presentations, worksheets, real documents and student handouts.
- Some lessons began, commendably, with a review of previous learning. There were also examples of teachers explicitly sharing the lessons’ objectives with students. All teachers should incorporate these good practices into their normal daily routine. In addition, a review of the achievement of objectives should be carried out prior to the end of each lesson.
- Lessons were purposeful and almost always well planned. However, care needs to be taken to ensure that work planned, and the pace at which it is covered, provides a sufficient challenge for better-able students.
- Good use was made of ICT in most lessons observed. This often facilitated the relating of lesson content to real life and to students’ own experiences.
- Better mathematical communication skills should be developed among students so that they can accurately explain where they have made an error or can express in the correct terminology the next steps in solving a problem. A greater focus on key words as part of the school’s numeracy strategy would assist in this process.
- Lessons were well managed and students were kept on task in almost all lessons. Mutual respect between teachers and students was observed and students’ efforts were affirmed.
- There was some very good monitoring of students’ written work that included positive comments on progress. The monitoring of progress through questioning, however, needs to focus more on individual students as a means of checking their understanding and learning.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT
- There is good quality provision and support for Mathematics. The amount of time allocated to the subject is good, although the scheduling of fifth and sixth-year classes is unsatisfactory. Every effort should be made to schedule Mathematics for each of the five days of the week to aid students’ daily progress.
- The school has recently adopted the good practice of teaching first-year classes as mixed-ability groups. This arrangement will be complemented by concurrent timetabling in second and third years so as to facilitate students’ access to the appropriate subject level.
• Students are encouraged to study Mathematics at the highest level possible. One way the school supports this is through the provision of supplementary lessons to third and sixth-year classes following the completion of mock examinations. To ensure the school’s capacity to continue to offer the subject at the highest level, the number of teachers involved in teaching Leaving Certificate higher level should be increased.

• Strategies to identify students who find Mathematics particularly challenging are appropriate and include the administration of a standardised group test. Support is provided through an increased time allocation to JCSP classes and through small-group withdrawal. Students’ are currently not retested to ascertain progress. This should be addressed, in line with DEIS requirements.

• There are members of the mathematics team who are not specialists in Mathematics. This should be addressed in future appointments and through encouraging teachers wishing to continue to teach Mathematics to undertake further study.

• Teachers are facilitated in attending in-service courses but at the time of the inspection, a number were not up to date in Project Maths sessions. It is recommended that every effort is made by teachers to catch up on courses missed and to participate fully in future Project Maths in-service.

• There is a good supply of resources in the school to support teaching and learning in Mathematics. These include practical hands-on resources, shared banks of topic tests and presentations saved to a shared laptop.

PLANNING AND PREPARATION

• The quality of planning and preparation in Mathematics is very good. A subject department structure is in place and the co-ordinator role rotates every two years.

• Formal meetings take place once per term and minutes indicate discussion and collaboration on areas including resources, organisation of classes and schemes of work. In future, subject meetings should include time for formal interaction and discussion on methodologies and associated classroom resources.

• The subject plan follows the format of published guidelines, but with a commendably comprehensive section on teachers’ continuing professional development (CPD). There is also a very valuable list of resources available in the school along with a description of how and when they might be used.

• In line with good practice, schemes of work for each year group and level have been prepared in terms of learning outcomes for students. Their linking to specified resources ensures they are working documents that inform teaching and learning.

• All teachers made personal planning folders available for review and these were indicative of thorough preparation for their teaching. Particularly useful elements included schemes of work incorporating review by individual teachers, student-friendly worksheets and games, workbooks prepared for JCSP classes and a collection of resources shared among teachers.
The draft findings and recommendations arising out of this evaluation were discussed with the principal and subject teachers at the conclusion of the evaluation.

The board of management was given an opportunity to comment in writing on the findings and recommendations of the report, and the response of the board will be found in the appendix of this report.

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Appendix

SCHOOL RESPONSE TO THE REPORT

Submitted by the Board of Management
Area 1: Observations on the content of the inspection report

The Board of Management of Mulroy College welcomes the findings of the recent Maths Inspection. The Board was pleased with the report and wishes to acknowledge the on-going dedication and commitment of the Maths Department in the College.

Area 2: Follow-up actions planned or undertaken since the completion of the inspection activity to implement the findings and recommendations of the inspection

The recommendations in the report have been accepted and these recommendations will be implemented, where possible, in the course of the year and also in subject planning for the next academic year.