

An Roinn Oideachais agus Scileanna

Department of Education and Skills

**Subject Inspection of Mathematics
REPORT**

**Mountrath Community School
Mountrath, County Laois
Roll number: 91550B**

Date of inspection: 4 April 2014



**A N R O I N N | D E P A R T M E N T O F
O I D E A C H A I S | E D U C A T I O N
A G U S S C I L E A N N A | A N D S K I L L S**

**REPORT
ON
THE QUALITY OF LEARNING AND TEACHING IN MATHEMATICS**

INFORMATION ON THE INSPECTION

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| Dates of inspection | 3 and 4 April 2014 |
| Inspection activities undertaken <ul style="list-style-type: none">• Review of relevant documents• Discussion with principal and teachers• Interaction with students• Discussion with the learning-support co-ordinator | <ul style="list-style-type: none">• Observation of teaching and learning during nine class periods• Examination of students' work• Feedback to principal and teachers |

MAIN FINDINGS

- The quality of teaching and learning was excellent or very good in the vast majority of lessons. However, in two of the lessons there was significant scope for improvement.
- The mathematics department has embraced the teaching methods espoused by project maths and there was little emphasis on traditional teaching or on the use of the textbook in mediating lesson delivery.
- Mathematics is very well supported by management. The mathematics department is very well resourced and timetabling provision for Mathematics is very good.
- Formal assessment practices in Mathematics are very good but there is room for improvement in the manner in which the students' copybooks are maintained and in the quality of written feedback provided to students on their homework.
- Subject department planning is well established and individual teacher lesson planning was, in the vast majority of cases very good.

MAIN RECOMMENDATIONS

- The very good practice evident in a small number of instances regarding the monitoring of student copybooks and the provision of quality written feedback to students should be adopted as standard across the department.
 - Future planning in Mathematics should focus on reconfiguring the schemes of work to make explicit the links between the various curricular strands, detail the approaches to be taken when carrying out common mathematical operations and strategies to incorporate problem solving as an integral part of lesson activity.
 - Concerns about the level of uptake of higher level Mathematics in senior cycle should be addressed as part of the school's self-evaluation process and clear targets for sustained improvement and strategies to achieve them should be put in place.
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INTRODUCTION

Mountrath Community School is a co-educational post-primary school with an enrolment of 735. The school opened in September 2009 following the amalgamation of the Brigidine Secondary School Mountrath, Patrician College, Ballyfin and St. Aengus Vocational School Mountrath. It provides a broad and balanced curriculum which includes Transition Year (TY) and the Leaving Certificate Vocational Programme (LCVP).

TEACHING AND LEARNING

- The quality of teaching and learning varied from excellent to very good in the vast majority of lessons. However, in two of the lessons there was significant scope for improvement.
- A wide variety of teaching methods were in evidence with very little emphasis on the more traditional style of teaching or on the use of the textbook in facilitating lesson delivery. This led, in almost all cases, to lessons that engaged the students in purposeful and student-centred learning.
- Where teaching and learning were best, the lesson's intention was clear, the teacher communicated high expectations of student engagement and attainment, resources were effectively integrated to reinforce key concepts and the lesson content was treated with an appropriate degree of rigour.
- In one of the poorer lessons, the lesson objective was unclear and the activities in which the students engaged did little to develop their understanding of the lesson content. In another, the pace of the lesson was pedantic, there was overemphasis on procedure and opportunities to engage the students in higher-order activities were eschewed. In both lessons, the level of expectation of student achievement was too low.
- In almost all of the lessons there was scope to enhance the quality of teacher questioning, particularly to challenge the more able students and to develop their analytical and problem-solving skills.
- Classroom management and student behavior were very good in all lessons and all interactions were courteous and respectful.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- Timetabling provision for Mathematics is very good. The time allocated is generous and the scheduling of mathematics classes guarantees that students can access the level most appropriate to their needs and can change level without disrupting their remaining timetable if the need arises. The provision of one double class of Mathematics per week in both fifth and sixth year is particularly welcome as it facilitates the teaching approaches advocated by Project Maths.
- Formal assessment practices in Mathematics are very good. Common assessments, prepared in rotation by the members of the department, are prepared for all formal assessments. The examination papers produced by the department are of a very high quality and reflect the aims of the new syllabi. The school, through its Academic Monitoring Programme, has an innovative approach to increasing the students' awareness of the role of assessment in their learning. Through the programme students, in partnership with the Academic Monitoring Team, assess their progress and set targets for improvement.
- A draft homework policy is in place and it contains a very welcome focus on the practice of *Assessment for Learning* (AfL). However, it is evident from the student copybooks that

the practice is only being adopted by a minority of mathematics teachers and as a result the condition of many of the copybooks was quite poor and featured very little feedback from teachers. This is in stark contrast to the quality of verbal feedback provided during lessons which was, in almost all cases, very good.

- Arrangements for identifying and supporting students with special education needs or requiring learning support in mathematics are comprehensive and student-centred.
- The mathematics department is very well resourced and its members are committed to their continuing professional development. The teachers have attended all of the workshops delivered as part of the rollout of Project Maths and two are undertaking postgraduate studies in Mathematics.

PLANNING AND PREPARATION

- Subject department planning in Mathematics is well advanced. Regular meetings are held and a very good subject department plan is in place. The plan contains a number of innovative ideas particularly in relation to the manner in which Mathematics links to the other subjects on the school's curriculum and the role of *AfL* in teaching Mathematics.
- Future developments to the plan should focus on the schemes of work and should extend their scope to make explicit the links between the various curricular strands, detail the approaches to be taken when carrying out common mathematical operations and strategies to incorporate problem solving as an integral part of lesson activity.
- Analysis of student performance in the certificate examinations is conducted annually and the department has identified the uptake of higher level Mathematics in senior cycle as an area for improvement. Some progress in this regard has already been made. However, it is recommended that as part of the school's self-evaluation process, clear targets for sustained improvement and strategies to achieve them are put in place.
- Individual teacher lesson planning was, in the vast majority of cases very good, particularly in relation to the integration of resources in lesson delivery.

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; a response was not received from the board.

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