

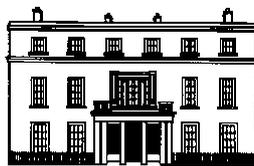
An Roinn Oideachais agus Scileanna

Department of Education and Skills

**Subject Inspection of Science and Chemistry
REPORT**

**Mountmellick Community School
Mountmellick, County Laois
Roll number: 91426A**

Date of inspection: 1 February 2013



**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 SCIENCE AND CHEMISTRY**

INFORMATION ON THE INSPECTION

Date(s) of inspection	31 January & 1 February 2013
Inspection activities undertaken <ul style="list-style-type: none">• Review of relevant documents• Discussion with principal and teachers• Interaction with students	<ul style="list-style-type: none">• Observation of teaching and learning during seven class periods• Examination of students' work• Feedback to principal and teachers

MAIN FINDINGS

- The overall quality of teaching and learning was very good.
- Students had a good knowledge and understanding of the lesson content and were competent and skilled in the completion of practical activities.
- Learning was supported through the identification of the desired learning outcomes for students, the use of group work and the linking of new material with prior learning or general knowledge.
- Students' progress was well monitored; however, there is scope for improvement in the assessment strategies used, as written work was not corrected in a consistent manner and in some lessons a significant number of students were not required to answer any questions.
- Whole-school provision and support for science subjects is very good.
- The quality of planning and preparation for the teaching of Science is very good.

MAIN RECOMMENDATIONS

- It is recommended that the science department review how assessment strategies are used in order to ensure that laboratory notebooks are corrected in a consistent manner and that as many students as possible are given an opportunity to actively contribute during lessons.
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INTRODUCTION

Mountmellick Community School is a co-educational post-primary school catering for a current enrolment of 465 students. The curricular programmes provided include the Junior Certificate, the established Leaving Certificate, and the Leaving Certificate Vocational Programme (LCVP).

TEACHING AND LEARNING

- The overall quality of teaching and learning was very good.
- Good use was made of an *assessment for learning* strategy in the clear identification of the desired learning outcomes for students at the start of lessons.
- Students' responses to questions showed that they generally had a good knowledge and understanding of the lesson content. It was also evident that they were competent and skilled in the completion of practical activities.
- Lesson content was communicated clearly with an appropriate emphasis on supporting the literacy needs of students. For example, key words and terms were highlighted and explained: notes and instructions were given in a simple and clear manner.
- The lessons were well organised and managed. Students were very engaged and they were attentive and cooperative with their teachers. Positive affirmation of students' efforts was evident both during the lessons and in the publicity given to their achievements in extracurricular science activities.
- Clear procedures had been established with respect to recording attendance, seating arrangements, and the assignment of homework. Generally, the lessons proceeded at a good pace. However, in some cases the pace could have been adjusted to ensure that the work planned was achieved in the time available.
- Teachers made extensive use of questioning to draw out students' prior knowledge of topics and to assess their progress. Good use was made of higher-order questions to probe their understanding. However, in some cases, some students, particularly girls, were not required to answer any questions during the lessons. It is recommended that the science department reviews how assessment strategies are used with a view to implementing strategies that aim to give as many students as possible an opportunity to actively contribute during lessons.
- Practical activities were very well organised and gave students an opportunity for hands-on active development of relevant skills and understanding. Active and independent learning was also supported through the use of group work in other lessons.
- Good practice was evident in the assignment of homework in all lessons. However, observation of students' laboratory notebooks showed mixed practice with respect to the correction of their reports of practical activities. Some work had been corrected and students were given advice on how to improve their reports. In other cases, there was no evidence in the notebooks that the work had been corrected. Hence, it is recommended that the science department also reviews this aspect of assessment of students' work with a view to devising a consistent agreed practice.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- The provision and support for science subjects is very good.
- Science is a core subject in junior cycle and senior cycle students can avail of four science subjects.
- Timetabling arrangements are appropriate with nearly all classes having a weekly double period.
- The laboratories are very well maintained and resourced. Good information and communication technology (ICT) facilities are available in the laboratories and management have initiated plans to upgrade the ICT facilities across the school in the near future.
- The school has a health and safety statement and appropriate health and safety equipment is available in the laboratories. Arrangements are in place to provide first-aid assistance if required.
- Teachers' attendance at continuing professional development (CPD) events is facilitated and some whole-staff training has been provided on relevant areas such as the use of ICT in teaching. Regular meetings of the science department are also facilitated.

PLANNING AND PREPARATION

- Planning and preparation for the provision of science is very good.
- The subject department is well organised. The role of coordinator is shared and the science teachers meet regularly, both formally and informally. A good record of their work is maintained. Good practice is evident in the consideration given at meetings to broader issues such as students' outcomes in state examinations or providing for students with special educational needs.
- A comprehensive subject plan, which is reviewed annually, has been developed. Teaching and learning is supported through the use of common schemes of work and common end-of-year assessments.
- Teaching resources are shared among staff both in hard copy and electronically. A dedicated folder on the school's ICT system is used to some extent to facilitate sharing of teaching resources. In conjunction with the planned upgrade in ICT facilities across the school, it is suggested that the science department could further explore the potential for developing and sharing of teaching resources by this means.
- Good systems are in place for the stocking of the laboratories with relevant resources needed for teaching science. Requests for resources are met on an on-going basis by management.
- It was evident from the manner in which content was introduced and developed that a lot of thought had gone into the preparation of the lessons observed.

The draft findings and recommendations arising out of this evaluation were discussed with the principal, deputy 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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