

An Roinn Oideachais agus Scileanna
Department of Education and Skills

Subject Inspection of Science and Biology
REPORT

Marino College
Fairview, Dublin
Roll number: 70250S

Date of inspection: 12 December 2011



AN ROINN | DEPARTMENT OF
OIDEACHAIS | EDUCATION
AGUS SCILEANNA | AND SKILLS

**REPORT
ON
THE QUALITY OF LEARNING AND TEACHING IN SCIENCE AND BIOLOGY**

INFORMATION ON THE INSPECTION

Date of inspection	12 December 2011
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 three class periods• Examination of students' work• Feedback to principal and teachers

MAIN FINDINGS

- Very good quality teaching was observed during this evaluation.
- Good ICT resources are available in the school. These are used effectively in planning for lessons and in their execution.
- The careful pre-planning of lessons ensured that students were actively and purposefully engaged in learning.
- Teachers made very good use of a variety of strategies to support students and to enable all students to access the lesson content. A good range of resources to support lessons has been developed.
- The school is actively promoting the uptake of science and it is commendable that the numbers of students choosing to study science has greatly increased over the last three years.
- Student self-assessment forms part of the planning for Leaving Certificate Biology.

MAIN RECOMMENDATIONS

- Science teachers should discuss and share best practice in the area of differentiated methodologies at subject department level.
 - Records of regular and systematic assessment of student learning should be retained by teachers.
-

INTRODUCTION

Marino College was established in 1936 and operates under the City of Dublin Vocational Education Committee (VEC). The secondary school has a total of 260 students with a further 461 following post leaving certificate (PLC) courses. Curricular programmes on offer include the Junior Certificate School Programme (JCSP), the Leaving Certificate Applied (LCA), the Leaving Certificate Vocational Programme (LCVP) and the established Leaving Certificate programme. Marino College participates in DEIS (Delivering Equality of Opportunity in Schools), the action plan of the Department of Education and Skills for educational inclusion.

TEACHING AND LEARNING

- The quality of teaching and learning observed was very good. An appropriate range of methodologies was utilised which engaged students and allowed for a good balance between teacher inputs and student activity.
- Learning outcomes were outlined to students at the start of the lessons and noted on the white board. Best practice was evident where these were revisited at the end of the lesson to summarise main points and consolidate learning.
- Teachers made good use of Information and Communications Technology (ICT) in their lessons. Power point presentations were clear and visually appealing. Video clips, photographs, animations and downloads from the Internet were also used to augment lessons. A good range of resources such as models, posters and teacher-developed resources such as jig-saws was also used.
- In all lessons, instruction was clear and concise. Classroom activities were well managed and well monitored. Discipline was good. Students were attentive and engaged with the lesson content.
- A positive and supportive learning environment prevailed and teachers went to great lengths to make the lesson content accessible to all students. However, there was a diverse range of abilities present in the lessons visited and teachers should discuss and share best practice in the area of differentiated methodologies at subject department level.
- Teachers made good use of questioning to challenge students to think for themselves as well as to check that learning was taking place in the lessons visited. In their responses, students showed good understanding of the concepts and facts taught.
- During practical work, students worked with good regard for health and safety procedures. They worked in groups of two and displayed good routines and appropriate skills.
- Students have notebooks for class notes and homework. Some showed evidence of checking and annotation. In some instances students were encouraged to follow up on corrections made. These are good practices and their more widespread use is recommended.
- Students have workbooks for practical work at junior certificate level and folders for Leaving Certificate Biology. These were generally maintained to a good standard.
- Assessment for learning (AfL) is used in classrooms and in the correction of students' work. Comment marking was evident in some notebooks. This is good practice and its more widespread use is recommended.

- For various reasons, end-of-topic assessment has not been used to its optimal level this year and it is recommended that regular and systematic monitoring of student learning take place and results be recorded and retained by teachers.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- Science is an optional subject in the junior cycle. All science students follow the JCSP. The school is actively promoting the uptake of science and it is commendable that the numbers of students choosing to study science has greatly increased over the last three years. Biology is available in the senior cycle and there is one class group in fifth year.
- Science classes are timetabled for four class periods per week in junior cycle and five in senior cycle Biology. This is appropriate. Each class has a minimum of one double period timetabled in the laboratory.
- The school has one laboratory which is well resourced. ICT available includes a data projector and PC as well as Internet access. All students have access to laptops and these are returned to a storage room for charging when not in use. All students have access to a JCSP library which is bright, well maintained has four PCs with Internet access.
- Science and Biology are taught by two qualified science teachers. At the time of the evaluation, a student teacher also formed part of the science team.
- Teachers have availed of continuing professional development (CPD) and most recent in-service has been on teaching and learning methodologies, stress management, assessment for learning and literacy and numeracy. This is good practice.
- The school has a homework policy and homework is regularly set. It is commendable that the school assessment policy details practices with regard to Assessment for Learning and Assessment of Learning.

PLANNING AND PREPARATION

- Management facilitates subject department planning through the provision of time for subject department meetings. A subject co-ordinator has been appointed, regular meetings are held and minutes are recorded.
 - Collaborative plans for Junior Certificate Science were provided. They contain detailed programmes of work within appropriate timeframes. At the next review of these plans, teachers should include reference to the learning outcomes for students as per the syllabus.
 - Detailed plans were in place for Leaving Certificate Biology and it is commendable that they included student self-assessments for completion at the end of each topic.
 - In line with the whole school policy, it is good to note that plans contained strategies to aid the development of literacy and numeracy. Appropriate links are in place with the Special Educational Needs department and planning folders contained advice for teachers when planning lessons for pupils with special educational needs.
-

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.

Published April 2012

Appendix

SCHOOL RESPONSE TO THE REPORT

Submitted by the Board of Management

Area 1: Observations on the content of the inspection report

The board are very pleased to note that the report affirms the high quality of teaching and learning in Marino College. This includes

- Use of a variety of strategies
- Good ICT resources used in planning and delivery of lessons
- Good pre-planning
- Student self assessment
- Science being actively promoted

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 school will endeavour to implement the main recommendations of the report.