

An Roinn Oideachais agus Scileanna
Department of Education and Skills

Subject Inspection of Science and Biology
REPORT

Newbridge College
Newbridge, County Kildare
Roll number: 61680T

Date of inspection: 8 April 2016



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

Dates of inspection	7 & 8 April 2016
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 ten class periods• Examination of students' work• Feedback to principal and teachers

MAIN FINDINGS

- The quality of teaching and learning in all the lessons observed was either good or very good.
- The teaching approaches used by teachers promoted the active involvement of students in the learning process and were student centred.
- Students made significant contributions to lessons and demonstrated very good evidence of quality learning.
- The use of many examples of assessment for learning strategies was evident in the lessons observed but the overall approach was uneven.
- The quality of students' written work was mostly very good with higher standards evident where monitoring and the provision of developmental feedback was more frequent.
- A very effective science department, with very good leadership, provides good quality support and co-ordination to teachers and supports classroom work.

MAIN RECOMMENDATIONS

- A more consistent team approach should be agreed and adopted in relation to assessment for learning strategies.
 - A consistent approach to setting standards and monitoring the quality of students' written work and providing students with written developmental feedback should be agreed and implemented.
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INTRODUCTION

Newbridge College is a fee-charging co-educational school with a current enrolment of 868 students. The school operates under the trusteeship of the Dominican Fathers. An optional Transition Year (TY) forms part of the school's senior cycle, alongside the Leaving Certificate Vocational Programme and the established Leaving Certificate.

TEACHING AND LEARNING

- The quality of teaching and learning in the lessons observed was either good or very good. All lessons were well prepared and, for the most part, were well structured; they proceeded at an appropriate pace and were well pitched.
- Learning intentions were shared appropriately with students in all lessons and this helped to set the high expectations that were apparent at all times.
- Information and communications technology was well used to display relevant slides and pictures and, in a number of cases, to guide and assist students while carrying out practical work.
- The teaching approaches used by teachers promoted the active involvement of students in the learning process and were student centred.
- There was a high level of interaction between teachers and students during the lessons. This interaction was facilitated by the good quality rapport and high level of respect evident between teachers and students.
- Consistent teacher movement amongst students promoted and enhanced the level and quality of interaction. Such movement also helped in assessing students' progress and facilitated teachers to support them when necessary, thus contributing to a differentiated approach to students' learning.
- Questioning and discussion were frequently used to assess student knowledge and understanding and teachers were very affirming of students' responses and contributions. Questions ranged from lower order to higher order, challenging students and encouraging them to think at a deeper level, as appropriate.
- Students responded very well to teachers and engaged positively in the learning process. They made significant contributions to lessons and demonstrated very good evidence of quality learning.
- Students' literacy development was well supported with an emphasis on subject-specific keywords and their use in context.
- The use of assessment for learning strategies, for example peer-assessment and self-assessment, was evident in the lessons observed but the overall approach was uneven. It is recommended that a more consistent team approach be agreed and adopted.
- The quality of students' written work was mostly very good. However, higher standards were evident where monitoring and the provision of developmental feedback was more frequent. It is recommended that a consistent approach to setting standards and monitoring the quality of written work and providing students with written developmental feedback be agreed and implemented.
- Students' practical work was managed efficiently in a safety-conscious manner. Appropriate plenary sessions were held beforehand, to ensure that students were fully briefed on the tasks ahead of them, and afterwards to review their work and rationalise their findings.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- Science and Biology are well supported and provided for in Newbridge College. Science is a core subject in junior cycle, in a significant element on the TY curriculum and Biology, Chemistry and Physics are all available to senior cycle students.
- The time allocated to the science subjects meets syllabus recommendation. Laboratories are well equipped and best use is being made of them.
- Teachers have facilitated a wide range of extra-curricular activities, including science competitions, quizzes, speakers and visits to industrial and other sites.
- Teachers have engaged in an extensive range of continuing professional development events and courses and this has been positively supported by school management.
- A comprehensive system is in operation to assess and record students' progress and to report to parents at regular intervals during the school year.
- There are good structures in place to support and include students with additional educational needs and enable them to achieve to the highest level possible.

PLANNING AND PREPARATION

- The quality of individual lesson planning was very good and all required resources were prepared in advance. The lessons observed were in keeping with schemes of work in the science department folder.
- A very effective science department provides good quality support and co-ordination to teachers and supports their work in the classroom. Leadership within the department is very good. Department records demonstrate the quality of ongoing work in relation to housekeeping matters and also that reflection in relation to pedagogical matters is a significant feature of the work of teachers.
- The common programmes of work are of a high quality and course delivery is appropriately scheduled, which facilitated the use of common assessments to the greatest extent possible.
- Outcomes for students are consistently very good in certificate examinations. In order to bring about further improvement, it is suggested that the science department examines the totality of the data available to it in order to acknowledge its strengths, and also the areas of relative weakness that can then be built upon in a planned and co-ordinated manner.

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 of the school was given an opportunity to comment on the findings and recommendations of the report; the board chose to accept the report without response.