

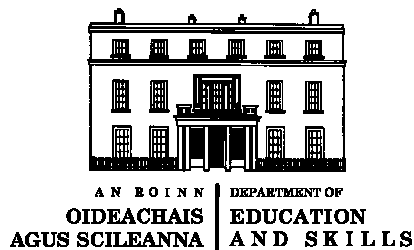
**An Roinn Oideachais agus Scileanna**

**Department of Education and Skills**

**Subject Inspection of Science and Biology  
REPORT**

**Eureka College  
Kells, County Meath  
Roll number: 6441OF**

**Date of inspection: 14 October 2015**



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

---

**INFORMATION ON THE INSPECTION**

<b>13<sup>th</sup> and 14<sup>th</sup> October 2015</b>	
<b>Inspection activities undertaken</b> <ul style="list-style-type: none"><li>• Review of relevant documents</li><li>• Discussion with principal and teachers</li><li>• Interaction with students</li></ul>	<ul style="list-style-type: none"><li>• Observation of teaching and learning during 8 class periods</li><li>• Examination of students' work</li><li>• Feedback to principal and teachers</li></ul>

**MAIN FINDINGS**

- The quality of teaching and learning ranged from good to very good.
- There were some instances of excellent practice in the lessons observed and areas for development in a minority of instances.
- Classroom management is effective and teachers regularly praised and affirmed students, which promoted student engagement in learning tasks.
- Some very good collaborative learning experiences were noted in practical activities.
- Students' notebooks were well organised and maintained, containing an appropriate volume of work and there was evidence that the work was monitored by teachers.
- The science team analyses student achievement in the certificate examinations; minutes of subject department meetings indicate that discussions take place around results and subsequent improvement planning.

**MAIN RECOMMENDATIONS**

- Planning for developing students' literacy and numeracy skills should be consolidated and enacted in lessons.
  - Teachers should discuss and share the good practices outlined in this report and plan to make them more widespread in lessons.
-

## **INTRODUCTION**

Eureka College is a voluntary secondary school. It caters for 664 girls providing the Junior Certificate, Leaving Certificate, Leaving Certificate Applied and Leaving Certificate Vocational Programme. A Transition Year (TY) programme is optional in the school.

## **TEACHING AND LEARNING**

- The quality of teaching and learning ranged from good to very good. There were some instances of excellent practice in the lessons observed and areas for development in a minority of instances.
- There was good continuity with prior learning and lessons were consistent with the planned programmes of work. Lessons had clear aims and learning intentions; these were communicated to the students at the outset giving lessons a good structure. Best practice was observed where the learning intentions were discussed with the students and this helped to ensure that high-quality learning took place.
- Classroom management was effective and students responded positively to clear class rules. Teacher instructions and learning activities were well organised and managed. Teachers praised and affirmed students regularly and this promoted student engagement in the learning tasks. In many of the lessons observed, students' enthusiasm and enjoyment of the subject was evident.
- An attractive and stimulating learning environment has been established which included impressive displays of student work. Key-words and subject specific vocabulary featured prominently in classroom displays; there was scope to make more use of these in the lessons observed.
- A good range of teaching methodologies was observed in many lessons, with a very good balance between teacher input and student activities. Some very good collaborative learning experiences were noted in practical activities. However, there were instances where a more structured and cooperative approach to group work was necessary in order to maximise learning potential. Good practices in this area should be discussed and shared among the science team.
- Teachers used a range of questioning approaches during lessons which mainly centred on the direct recall of lesson content. While there were some instances where more challenging higher order questions were included, there was scope to develop this area further. Teachers should be mindful of providing appropriate challenge for students in all activities and ensure lesson content and pace are appropriate to the class group, the subject matter and the time available.
- Students demonstrated a good level of knowledge and understanding of the topics under study and their participation in classroom activities was closely monitored by the teacher. Resources, including information and communication technology (ICT), were used effectively to enhance learning and to engage students.
- Practical work was well organised and students followed well-established and effective routines for setting up and cleaning away equipment. All practical lessons proceeded with good attention to health and safety procedures. In some lessons, students engaged very well in discussions with their teacher regarding approaches to be used and the results achieved. It is recommended that more autonomy be extended to students during practical

activities in order to foster an investigative approach to learning and to maximise independent learning opportunities.

- Very good *assessment for learning* (AfL) strategies were observed in some lessons; the use of mini-whiteboards was particularly successful. Students' notebooks were well organised and maintained, containing an appropriate volume of work; there was evidence that the work was monitored by teachers. It keeping with good practice, students are encouraged to complete experiment write-ups in their own words. However, there is scope for teachers to provide more directional feedback, providing students with direction on how their work can be improved.

#### **SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT**

- Science is provided for all first-year students as part of a taster programme of subjects. The optional TY contains elements of all four senior-cycle science subjects. At Leaving Certificate level, Biology, Chemistry, Physics and Agricultural Science are offered.
- The sciences are well supported in the school and students are encouraged to engage with a wide range of science-related activities.
- There are three well-resourced laboratories which are tidy and well maintained. The adjacent preparation areas are well organised and chemicals are stored appropriately.
- The science teachers are appropriately qualified and have attended a good range of continuing professional development activities.

#### **PLANNING AND PREPARATION**

- Comprehensive and well-structured planning documentation was available for Science in all year groups. Schemes of work place an appropriate focus on learning outcomes for students; commendably, they include plans for the development of students' literacy and numeracy skills.
- Planning documentation for TY includes a very good range of assessment modes such as posters and presentations.
- The science team analyses student achievement in the certificate examinations and minutes of subject department meetings indicate that discussions take place around the results and subsequent improvement planning. This is very good practice.

---

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.