

**An Roinn Oideachais agus Scileanna**

**Department of Education and Skills**

**Subject Inspection of Science  
REPORT**

**Gairmscoil Éinne, Cill Rónáin  
Árainn, Co na Gaillimhe  
Roll number: 71300M**

**Date of inspection: 18 May 2011**



**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**

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**INFORMATION ON THE INSPECTION**

<b>Date of inspection</b>	18 May 2011
<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 three class periods</li><li>• Examination of students' work</li><li>• Feedback to principal and teachers</li></ul>

**MAIN FINDINGS**

- Teaching and learning was good in the classes observed.
- The school's Transition Year does not currently include a science component.
- Each year students have a change of teacher between first year and second year.
- There is high quality collaborative planning for Science.
- The school has good resources for Science.
- The school is on the threshold of a major advance in the incorporation of information and communication technology (ICT) in Science.

**MAIN RECOMMENDATIONS**

- The good practice of checking students' written work regularly should be developed further to include the provision of written feedback and guidance on their work to students in all cases.
  - There should be greater continuity in Science provision for students between first year and second year.
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## **INTRODUCTION**

Gairmscoil Éinne is a vocational school under the management of County Galway Vocational Education Committee (VEC) and has an enrolment of 70 students. The school serves Inis Mór, the largest of the Aran Islands, which is a Gaeltacht area. All school activities are conducted through the medium of Irish. The school has an optional Transition Year (TY).

## **TEACHING AND LEARNING**

- Teaching and learning was good in each of the lessons observed. It was clear that students were learning in each lesson.
- While the lessons observed had a clear purpose, the engagement of students in the lessons would have been enhanced through referring to the learning objectives at the beginning of lessons.
- The lessons observed included a range of teaching methodologies to which students responded well.
- The commitment of teachers to students' learning was evident in that students who may have missed lessons are given additional assistance.
- In order to reduce the emphasis on the teacher as the central focus of lessons and to give greater structure to lessons, independent student learning during lessons should be emphasised to a greater extent, for example through working on problem-solving exercises and discussing science-based issues.
- Differentiation is supported by the very good provision of display materials on the walls of the laboratory and the use made of ICT in teaching and learning. To supplement these, the display of keywords should be routine in all lessons.
- All lessons observed were characterised by a very good atmosphere, very good student-teacher rapport, very good classroom management and a high degree of student attention and engagement.
- Students are supported in their learning through the provision of comprehensive support material for science including printed notes.
- The student-based practical work seen was well managed. Consideration should be given to including credit for this work in school examinations.
- To develop students' interest and abilities with regard to investigative science and to support the preparation of students for the junior certificate science project, it is suggested that small projects for students be included in the first-year and second-year science programmes.
- All students' written work is well presented and is checked regularly. This good practice should be developed further to include the provision to students of written feedback and guidance on their written work.

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

- Science is a core subject on the school's curriculum and time allocation for the subject is appropriate. As far as possible science classes should have just one double lesson period each week.

- Arising from staffing considerations there is a change of teacher for Science between first-year and second-year and as a result the junior science curriculum is comprised exclusively of biology in first year while in second and third year it is almost exclusively physics and chemistry.
- While it is noted that there is a high level of co-operation and communication between the teachers of Science, consideration should be given by the school to including some Physics and Chemistry in the first-year programme and having a greater emphasis on Biology in second year and in third year.
- Due to staffing limitations the school's Transition Year does not currently have a science component. The school is keeping this issue under review and is open to including science in the programme as resources allow, perhaps through the use of ICT.
- The central importance accorded by the science department to assessment is shown by the inclusion of detailed information on assessment and examination procedures in the science department's planning folder.
- Consideration should be given to formalising the school's current informal analysis of its state examination outcomes.
- The science department organises a wide range of co-curricular and extracurricular activities. The school's involvement in a long-term international project on water is especially noteworthy.
- The science teachers' continuing professional development includes participation in the *Discover Sensors* project, the impact of which is evident in classroom practice.
- A significant and substantial development is currently underway in the school with regard to the adoption of ICT for teaching and learning and the sharing of teaching and other resources through ICT with other schools in the County Galway VEC scheme. As part of this students in junior cycle will shortly each be provided with a netbook.
- The school is in the process of addressing issues raised in the risk assessment carried out on the science teaching area. To support the continued consistent addressing of safety issues with regard to science, the science department should carry out a health and safety audit of the science laboratory on an annual basis.
- The science laboratory is in good order and is well-equipped and well maintained. The school is in the course of improving its provision for the safe storage of chemicals in the laboratory preparation room.
- The science department gives much attention to the selection of suitable Irish-language teaching resources for Science.

#### **PLANNING AND PREPARATION**

- Subject planning in the science department is characterised by high levels of co-operation and excellent sharing of resources, including ICT resources.
- Considerable work has been carried out on the preparation of the well-laid-out science department plan. In developing the plan further reference should be made to learning objectives as included in the science syllabus; provision for guidance of students with regard to systematic revision of their work should also be included.

- The science department shows good practice in having a safety plan that includes provision for reporting accidents and breakages.
  - The science department has a common electronic folder in which all of its ICT resources are stored as well as a common file for other science resources.
  - Planning and preparation of the science lessons observed was of a high quality.
  - In its future work the science department should include provision for collaborative action planning with regard to the incorporation of ICT and differentiation of teaching and learning.
  - Records are kept of students' progress in science and reports are sent regularly to students' parents.
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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.