

An Roinn Oideachais agus Scileanna

Department of Education and Skills

**Subject Inspection of Science
REPORT**

**Elphin Community College
Elphin, County Roscommon
Roll number: 722800**

Date of inspection: 7 October 2011



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

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

INFORMATION ON THE INSPECTION

Date of inspection	7 October 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 four class periods• Examination of students' work• Feedback to principal and teachers

MAIN FINDINGS

- Good quality student learning was evident and teaching was good or very good in each of the lessons observed.
- Science is well supported on the curriculum of the school with core subject status in junior cycle and an appropriate time allocation.
- Meeting the learning needs of students with additional educational needs is supported by the very good links that exist between the learning-support department and the science department.
- The management of the large number of books required by second-year and third-year Science students may be a challenge for some.
- Students' interest and skills in Science are stimulated through regular participation by the school in the Young Scientist and Technology Exhibition and in Scifest.

MAIN RECOMMENDATIONS

- The science department should build on its good practice in the analysis of State Examination Commission outcomes through targeting a greater number of students to take the subject at higher level in the Junior Certificate examination.
 - The science department should examine its policy with regard to the number of books required by students in second year and third year.
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INTRODUCTION

Elphin Community College is under the management of Co Roscommon Vocational Education Committee and has an enrolment of 137 students. The school's Transition Year (TY) programme is taken by all students. The school has been extended recently and refurbished.

TEACHING AND LEARNING

- Teaching was good or very good in each of the lessons observed. Good quality student learning was evident in each lesson observed.
- Good use was made of learning outcomes in introducing lessons. Where very good practice was evident, they were used in summarising lessons and in assessing students' learning.
- There was a good range of methodologies in use in each of the lessons observed.
- It is suggested that small-scale student projects should be included in the first-year and the second-year programmes to assist students in acquiring the skills required for carrying out the third-year coursework project.
- Good practice was seen in the student practical work observed; it commenced and concluded with classroom discussion of the methodology to be used and of the results obtained.
- Good use was made of information and communication technology (ICT) in the presentation of lessons. This should be extended further into other areas such as assessment of students' learning.
- Questioning of students was used effectively in each lesson to ascertain students' knowledge and to guide their learning. In some cases good use was made of wait time. In developing this further, teachers should consider using a greater proportion of open questions and students should be encouraged to use complete sentences in their answers. Such practice will help in the development of students' literacy skills.
- As a further part of the school's emphasis on developing students' literacy and numeracy skills, there should be a focus in first year on developing students' abilities in presenting written work, for example reports on practical work carried out.
- There was a very good atmosphere evident in each lesson observed, with very good student-teacher relationships. In each lesson students were engaged with the subject matter of the lesson. Classroom management was very good in each lesson.
- It is clear that students' work is regularly assessed and examples were seen of the formative assessment of students' work. Policies and practices in relation to formative assessment in Science should be included in the department's plan.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- There is a good curricular provision for science; it is a core subject in junior cycle, has an appropriate time allocation, and there is adequate provision for double-lesson periods.
- Regular participation by the school in the Young Scientist and Technology Exhibition and in Scifest stimulates students' interest and skills with regard to project work and teamwork in Science.

- The work of the science department is supported by whole-school assessment and homework policies. The school's homework policy shows good practice in that it includes commitments from the school in relation to students' homework, its correction and giving positive and constructive feedback to students.
- It is school policy that students' certificate examination results are compared with national norms each year. The science department should build on its analysis through targeting a greater number of students to take higher level in the Junior Certificate examination.
- Science is well resourced. The science department should develop a systematic procedure for stock control and identification of resource needs, for example a breakages book and a means of keeping track of stocks of equipment and other resources.
- The science department is very well equipped to use digital resources in its work. The provision of a dedicated printer for the department could be considered as resources allow.
- The display of interesting visual material related to science in the laboratory and the reference to it during lessons served to stimulate students' interest and so assist their learning.
- Teachers have attended appropriate professional development courses and are supported by school management in so doing.
- There are very good links between the learning-support department and the science department. These support the science teachers in meeting the learning needs of students especially those with additional educational needs.

PLANNING AND PREPARATION

- The science department meets on a regular basis and records are kept of these meetings. Such records should follow good practice through being confined to recording the topics discussed and the key decisions made. The primary purpose of the records should be to facilitate the ongoing development of teaching and learning within the department.
- Good planning practices are evident in Science and good use is made of ICT with regard to storing lesson resources.
- In line with overall school policy safety is a high priority in the science department and along with other subject departments risk assessments have been undertaken.
- The department's planning folder includes schemes of work that are laid out in terms of learning outcomes. As these plans are further developed, provision should be made to include in them the activities, assessment, and resources that are relevant to attaining the learning objectives.
- According to the TY plan reviewed, the school's TY Science programme is based on student project work and makes use of self-directed learning including the development of students' research skills. This is very good practice. The content of the school's TY science curriculum should be included in the department's plan.
- The commitment of the school and the science department to meeting the needs of all students is supported by the inclusion in the department plan of advice on differentiation and strategies to support students with special educational needs.

- The science department practice in relation to students' notebooks and textbooks is that junior cycle students, with the exception of first years, have three notebooks, a textbook, a laboratory report book, and a workbook. Even though it is department practice that these are mostly retained in the school, the need for so many books should be reviewed.
- The science department should set up, in co-operation with students, a systematic programme for revision of their work over the course of the junior cycle.
- All lessons were very well planned and prepared.

The draft findings and recommendations arising out of this evaluation were discussed with the principal and the subject teachers at the conclusion of the evaluation. The board of management of the school 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.

Appendix

SCHOOL RESPONSE TO THE REPORT

Submitted by the Board of Management

Area 1 Observations on the content of the inspection report

Area 2 Follow-up actions planned or undertaken since the completion of the inspection activity to implement the findings and recommendations of the inspection.

- Following a review of the report by the Science Department, we will discontinue use of the workbook.
- Following review of the report, the Science Department has started to implement a revision programme, with input from students, for all Junior Cycle students.
- Following review, we have reintroduced a breakages book to aid stock control.
- Following review, we are attempting to introduce small-scale project work for first-year students but are working out the logistics of the implementation for the next school year and considering time allocations.