

An Roinn Oideachais agus Scileanna
Department of Education and Skills

Subject Inspection of Science and Biology
REPORT

Rosses Community School
Dungloe, County Donegal
Roll number: 91407T

Date of inspection: 27 March 2012



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 AND BIOLOGY**

INFORMATION ON THE INSPECTION

Date of inspection	27 March 2012
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 seven class periods• Examination of students' work• Feedback to principal and teachers

MAIN FINDINGS

- The quality of teaching and learning observed ranged from good to very good and lessons were well structured and appropriately pitched.
- The enthusiastic approach of the science teachers was very effective in maintaining students' interest in the lesson activities.
- Very effective use of a range of resources was observed and this included information and communications technology (ICT).
- Classroom management was very good and teaching and learning proceeded in a caring and respectful atmosphere.
- Good routines have been established for the correction of homework and students are encouraged to follow up on corrections.
- The science department is dedicated, collaborative and well coordinated.

MAIN RECOMMENDATIONS

- It is now timely for all members of the science team to consider how their very good practices can be shared and utilised across the science department.
- Action planning should be progressed to include specific targets, success criteria and the timeframe involved.
- Programmes of study should be further developed to include learning outcomes where necessary.

INTRODUCTION

The Rosses Community School is a co-educational school with a total enrolment of 498 students. In addition to the Junior Certificate and Leaving Certificate programmes, the school offers an optional Transition Year programme (TY), Leaving Certificate Applied (LCA) and the Leaving Certificate Vocational Programme (LCVP).

TEACHING AND LEARNING

- The quality of teaching and learning observed ranged from good to very good. There was a strong focus on teaching for understanding and learning in all lessons observed. Lessons were well structured and appropriately pitched. Learning outcomes were discussed with students at the beginning of lessons. This good practice was most effective when they were revisited during the lesson and used to summarise at the end. Time should be set aside at the end of all lessons for this practice. Other good *Assessment for Learning* practices used included the use of the traffic lights learning check, mind maps and the use of detailed formative feedback on a task. These are good practices.
- Teacher instruction was very clear and accurate, key concepts were emphasised and, where relevant, teachers used up-to-date information and everyday examples to clarify and explain topics. The enthusiastic approach of the teachers was also effective in maintaining students' interest in the lesson activities. Students worked purposefully and were actively engaged in the learning process.
- Very good use of ICT was observed in all lessons. Resources such as clips from DVDs and drag and drop exercises were well chosen and very relevant to the topics under study. Very effective worksheets were used to complement the Powerpoint presentations used.
- In all lessons observed classroom management was very good. Students were attentive and discipline was good. Teaching and learning proceeded in a caring and respectful atmosphere and teachers had created a pleasant and supportive learning environment. Students were given the opportunity to work independently and in small groups. Some very effective use of paired work was used to promote peer-tutoring and the sharing of knowledge in small groups. These are good practices.
- Teachers went to great lengths to include all students and methodologies selected were generally appropriate to students' abilities, needs and interests. Some very good use of differentiated methodologies was used where lessons were differentiated for content and outcome. These good practices should be discussed and shared among the science team.
- Questioning was used in all classes to check on previous knowledge, learning and understanding. Students' responses to questions indicated a very good level of knowledge and understanding. They were appropriately challenged through the use of a range of questioning strategies which included higher-order questions.
- There was a good emphasis on the development of students' literacy and numeracy skills with frequent emphasis on pronunciation and spelling of key words, use of JCSP posters

and emphasis on the correct use of units and graphical display in numeracy. One good practice is the displays of laminated posters which show a picture of the apparatus as well as its name and function.

- Students are assessed through formative and summative means. Homework is regularly set and checked. Good routines have been established for the correction of homework and students are encouraged to follow up on corrections.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- Science is an optional subject in the junior cycle and uptake is very good. The majority of students avail of the optional TY programme in which modules of Chemistry, Biology and Physics are provided. All three sciences are available at leaving certificate level.
- There is very good provision and whole-school support for Science and Biology. Timetabling of the subjects is very satisfactory.
- Senior management is very supportive of and facilitates the continuing professional development (CPD) of teachers at whole-staff level and at subject department level. The science team have attended a range of courses provided by the Irish Science Teachers Association (ISTA) and the Professional Development Service for Teachers (PDST).
- There are two laboratories in the school and demand for these facilities is high. One laboratory has been recently refurbished to a high standard and the second laboratory would benefit from refurbishment. Management currently have made application to the Department of Education and Skills in this regard. Preparation areas are tidy and well organised with an appropriate level of health and safety equipment.
- Teachers have created a stimulating learning environment in the classrooms. There is very good provision of and access to ICT equipment for science.
- Teachers maintain good records of student attendance, homework allocated and completed as well as achievement in class assessments. Contact with parents is maintained through letters and telephone contact as well as reports on students' progress. Parent-teacher meetings are held on an annual basis for each year group and additional parent-teacher meetings are organised after the mock certificate examinations for third and sixth-year students.

PLANNING AND PREPARATION

- There is a dedicated science department in this school with evidence of good collaboration and co-ordination. Currently the role of subject co-ordinator rotates amongst the science teachers and this is good practice.
- Minutes of subject department meetings indicate that there is a proactive and organised approach to subject planning for Science. A comprehensive subject department plan has been developed.
- High quality and detailed programmes of work were provided for Junior Certificate Science, Leaving Certificate Biology and the science elective course in LCA. These programmes would be enhanced by the inclusion of learning outcomes for students.

- Planning for the science modules offered in TY is in line with the key principles of the transition year programme and a broad and varied programme is provided.
- Teachers' individual planning is of a good quality and there is evidence that a good level of collaboration takes place between the special educational needs department and the science department. Many cross-curricular links have been established and this has been enhanced through the work of literacy and numeracy teams in the school.
- It is positive to note that the science department has adopted a reflective approach to subject planning as well as action planning. This process should be expanded to include specific targets, personnel involved as well as success criteria and the timeframe involved.

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.