

An Roinn Oideachais agus Scileanna
Department of Education and Skills

Subject Inspection of Science and Biology
REPORT

Lusk Community College
Lusk, County Dublin
Roll number: 76213T

Date of inspection: 21 October 2015



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	21 st October 2015
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 five class periods• Examination of students' work• Feedback to principal and teachers

MAIN FINDINGS

- The quality of teaching and learning ranged from good to excellent practice.
- The science teachers had planned meticulously for their lessons.
- The lessons included well-chosen resources, some researched from the Internet and others were teacher developed.
- In all lessons observed, classroom management was very good and lessons proceeded in a pleasant and supportive learning environment.
- Excellent practice was noted where teachers adopted an investigative approach to planning for experimental work and encouraged students to engage in discussions involving fair testing and the use of a control in experiments.
- The science department is well co-ordinated and there is a high level of collaboration among the science team.

MAIN RECOMMENDATIONS

- The science team should discuss and share the good practices in teaching and learning noted in this report at subject department meetings.
 - Teachers should encourage all students to maintain good records of their work and follow up on corrections noted.
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INTRODUCTION

Lusk Community College is a co-educational school operating under the auspices of Dublin and Dun Laoghaire Education and Training Board (ETB). The school opened in August 2013 and now caters for a total of 380 students in first, second and third year of the Junior Cycle programme. Plans are currently underway to provide a Transition Year (TY), Leaving Certificate Applied (LCA), Leaving Certificate Vocational Programme (LCVP) as well as the Leaving Certificate programme.

TEACHING AND LEARNING

- The quality of teaching and learning ranged from good to excellent. While there were some areas for development, these were in the minority.
- The science teachers had planned meticulously for their lessons. Learning intentions were shared with students at the beginning of lessons, revisited during the lessons and used to summarise at their conclusion. While recapitulations were generally comprehensive, teachers should be mindful to incorporate inputs from students.
- Teacher instruction was very clear and accurate. The lesson content was informed by up-to-date information and everyday examples.
- Good practices were observed where students were given opportunities to work in pairs and provide feedback to the teacher or to the entire class. Teachers made good use of these opportunities to discuss responses and consolidate learning either verbally or through brainstorming on the white board.
- The lessons included well-chosen resources, some researched from the Internet and others that were teacher developed. Good use was made of websites, animations, diagrams, pictures and worksheets. Particularly good use was made of iPads containing a show-me app. PowerPoint presentations were clear and appropriately pitched.
- Student literacy and numeracy skills were developed through the use of key words, subject-specific terminology and the use of units and calculations.
- In all lessons observed, classroom management was very good. Teachers created a pleasant and supportive learning environment. Teaching and learning proceeded in a caring and respectful atmosphere.
- A range of questioning strategies was used and these varied from direct recall to those which promoted higher-order thinking skills. This served to add good challenge to tasks. Questioning was also used to encourage students' contributions to discussions and check on previous knowledge. Best practice was observed where teachers differentiated questioning types to accommodate all learners' abilities.
- Some lessons were differentiated with regard to outcome. It is good to note that this has been an area of focus in the schemes of work of the science department. The science team should discuss and share good practice in this area at subject department meetings.
- During practical work, students worked purposefully with very good attention to health and safety regulations. Teachers have adopted an investigative approach to planning for experimental work and encourage students to engage in discussions involving fair testing and the use of a control in experiments; this is excellent practice.

- Students' notebooks and copybooks were generally well organised and well maintained. They contained an appropriate volume of work and indicated good progress in students' learning. Teachers should encourage all students to maintain good records of work to be used as revision aids in the future.
- Homework is assigned and monitored regularly. There were some very good examples of the provision of constructive feedback on written work and practical coursework. Teachers should encourage students to follow-up on corrections made. Some very good examples of *assessment for learning* practices were noted and included worksheets, mini-white boards and traffic lights.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- Science is a core subject at Junior Certificate level and all science classes are appropriately timetabled for one double class and two single-class periods.
- The school currently has one well-resourced laboratory linked to a preparation area and chemical store. Both are well organised and chemicals are stored appropriately. However, given the high practical content of the Junior Certificate Science syllabus, one laboratory is insufficient to provide all seventeen science classes timetabled at the time of the evaluation.
- Senior management is very supportive of and facilitates continuing professional development (CPD) at whole-staff level and at subject department level.

PLANNING AND PREPARATION

- The science department is well co-ordinated and there is a high level of collaboration among the science team. Currently, the role of subject convenor is rotated among the team; this is good practice.
- Minutes of subject department meetings indicate that there is a proactive and organised approach to subject planning for Science. Comprehensive subject department planning documentation was provided that included long-term plans for each year group as well as shorter schemes of work for each topic. All planning documentation focused on learning intentions for students and included modes of assessment, core competencies and development of students' literacy and numeracy skills.
- Teachers' individual planning was of a high quality and there is evidence that a good level of collaboration takes place between the special educational needs (SEN) department and the science team.
- It is most praiseworthy that the science team has engaged with peer observation, and it reports benefits from it. Commendably, the science team has adopted a reflective approach to staff development and has produced a staff-development plan where staff needs are indicated and activities are proposed to senior management.

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 was given an opportunity to comment in writing on the findings and recommendations of the report; a response was not received from the board.

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