

An Roinn Oideachais agus Scileanna

Department of Education and Skills

**Subject Inspection of Science
REPORT**

**Coláiste Pobail Setanta
Phibblestown, Clonee, Dublin 15
Roll number: 76098W**

Date of inspection: 19 October 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**

INFORMATION ON THE INSPECTION

Date(s) of inspection	
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 7 class periods• Examination of students' work• Feedback to principal and teachers

MAIN FINDINGS

- The quality of teaching and learning was very good in all of the lessons observed.
- An 'assessment for learning' approach was evident across all of the lessons observed and in the work of the science department.
- Though students' reports on practical activities are well monitored, in many cases the reports on practical activities were simply transcribed from the textbook or other sources.
- There is very good whole-school support for the provision of Science.
- The quality of subject department planning is very good.
- Though a good level of planning for health and safety issues is evident in the development of safety contracts, laboratory rules and safety checklists, as part of the science plan, guidelines for dealing with emergency situations in the laboratories have not been formalised.

MAIN RECOMMENDATIONS

- As part of its ongoing planning activity, the science department should develop strategies to support the development of independent report-writing skills by students.
 - To enhance the planning already in place for health and safety issues, the science department should develop simple guidelines for dealing with emergency situations involving either students or staff.
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INTRODUCTION

Coláiste Pobail Setanta is a co-educational post-primary school under the aegis of County Dublin Vocational Education Committee. It is located in the new and developing area of Dublin 15. From the entry of the first students in August 2008, the school population has grown to the current enrolment of 401 students. The school moved from temporary accommodation into a new school building in 2010. At present the school has students in first, second, third, and fifth year. Planning for the provision of a Transition Year programme and the completion of the senior cycle is underway.

TEACHING AND LEARNING

- The quality of teaching and learning was very good in all of the lessons observed. A variety and range of appropriate teaching methodologies were used throughout.
- A student-centred and active approach to learning was evident in all of the lessons.
- Very good use was made of ‘assessment for learning’ strategies. This was seen in the sharing of learning objectives with students, the setting of homework at the start of lessons, and the use of checklists to guide students’ independent study and revision.
- Very good use was made of resources to support the learning process. In particular, very good use was made of the interactive whiteboards which are available in all of the laboratories. Worksheets and notes were very well designed to promote active learning by the inclusion of student activities as well as information on the topic in question.
- Lessons were very well organised and managed. A supportive and positive rapport was evident in the teacher-student interactions which encouraged students to participate fully in the lessons.
- The lessons were well paced and structured with a strong focus on student learning.
- Students’ progress throughout the lessons was well monitored through teacher observation and the use of good questioning techniques which supported students’ learning. Good practice was evident in the involvement of students in the assessment of their own progress, for example through the use of peer assessment of work completed in class.
- The purposeful atmosphere in the lessons was evident in a strong emphasis on the setting and correction of homework.
- Students’ reports on practical activities are well monitored and corrected. The use of templates to support first-year students report writing is good practice. However, it was noted that many reports were simply transcribed, for the most part, from the textbook or other sources. Hence, it is recommended that the development of students’ independent report-writing skills be considered by the subject department as part of its ongoing planning.
- A positive and affirmative image for Science has been created through the displays of students’ work both inside and outside the laboratories.
- An innovative approach to teaching was evident in the use of classroom strategies such as the use of mini-whiteboards, ‘traffic-lights’, and ‘exit-tickets’. These strategies ensured the involvement of all students in the learning process.

- The explanation of new or key scientific terms and the use of simple clear language in slides, worksheets and other written materials supported the literacy needs of students.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- There is very good whole-school support for the provision of Science.
- Science is a core subject in junior cycle and planning is underway for the inclusion of Science in a Transition Year programme. Students are offered a choice of three Leaving Certificate science subjects and are well supported in making choices in this regard.
- Timetabling arrangements for Science are good as they facilitate practical activities and regular class contact.
- Classes are of mixed ability and of an appropriate size for the completion of practical activities.
- The school has excellent resources for the teaching of Science. The five laboratories are fully equipped and well organised.
- The school is very supportive of the continuing professional development of teachers and makes good use of the expertise available within the school staff. In particular, teachers' professional development is facilitated through a peer learning initiative where teachers observe and reflect on each others' practice.
- Practical advice and support to learning is provided through the development by the school of useful teacher handbooks, student journals and other information booklets.

PLANNING AND PREPARATION

- The quality of planning and preparation for the provision of Science is very good. The science plan is very well developed and addresses a wide range of issues relevant to the teaching of Science.
- A good level of planning for health and safety issues is evident in the development of safety contracts, laboratory rules, and safety checklists as part of the science plan. However, guidelines as to what to do in the event of an emergency involving either students or staff have not been formalised. It is recommended that simple guidelines for dealing with emergency situations should be developed and included in the science plan.
- The science department is very well organised. Planning is carried out in a coordinated manner, both formally through regular subject department meetings and informally through ongoing liaison between teachers.
- The members of the science department work collaboratively in the development and sharing of schemes of work, resources and assessment materials. This collaborative approach is also evident in the discussion of, and sharing of, professional practice at subject department meetings.
- Good practice is evident in the planning for teaching of mixed-ability groups by the inclusion of differentiated learning outcomes in the schemes of work which identify what all, most or some students should be able to achieve.

- Planning for individual lessons was of a high quality: resources were prepared in advance, lesson pace and structure had been thought out and there were clear aims and objectives to each lesson.
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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, 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.

The Board welcomes the report and its validation of the excellent learning and teaching in our school.

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

The Board is happy to support staff in acting on both recommendations in the report. The safety instructions have already been updated. The scaffolding approach to writing experiments will be phased out as students become more experienced and proficient in writing their experiments.