

An Roinn Oideachais agus Scileanna

Department of Education and Skills

**Subject Inspection of Science
REPORT**

**Adamstown Community College
Station Road, Adamstown, Co Dublin
Roll number: 76097U**

Date of inspection: 30 November 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 eight class periods• Examination of students' work• Feedback to principal and teachers

MAIN FINDINGS

- The overall quality of teaching and learning was good and some features of very good practice were observed in all of the lessons.
- A student-centred and active approach was taken to the teaching and learning of Science.
- Lessons and practical activities were well managed and conducted in a positive, affirmative atmosphere.
- There is very good whole-school support for the provision of Science.
- The quality of planning and preparation for the provision of Science is good.
- The science department has expanded greatly since the establishment of the school and the development of the science plan is a work in progress.

MAIN RECOMMENDATIONS

- To enhance the subject planning already in place, the science department should prioritise the development of schemes of work based on intended learning outcomes and the sharing of teaching methodologies as the focus for future subject planning.
 - In conjunction with the development of schemes of work based on learning outcomes, greater use should be made of such outcomes to plan the structure of lessons and to assess whether or not students had achieved these outcomes at the end of lessons.
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INTRODUCTION

Adamstown Community College is a co-educational post-primary school, with an enrolment of 353 students, under the aegis of County Dublin Vocational Education Committee. The school opened in September 2009 and at present has students in first, second and third year. Planning for the introduction of the senior cycle programmes, Transition Year, Leaving Certificate Applied and the established Leaving Certificate, is underway. The school is located in the newly developed area of Adamstown.

TEACHING AND LEARNING

- The overall quality of teaching and learning was good and some features of very good practice were observed in all lessons.
- The teaching of science was based on a student-centred approach which ensured that students were actively engaged in learning through the completion of practical activities, discussion, and responding to questions during the lessons observed.
- The creation of good links with prior knowledge and science in the everyday world helped to consolidate learning and to make the lessons interesting.
- The lessons were very well managed in a supportive and positive atmosphere.
- Practical activities were well organised and supported the development of the students' investigative skills. Students completed the activities in a very competent manner and assisted with the organisation of equipment and materials.
- Some very good use was made of directed and higher-order questions to engage students in learning and to assess their progress during the lessons. Students' progress is also well monitored through frequent correction of homework. Parent-teacher meetings, students' journals and three formal written reports per year help to keep parents well informed of students' progress.
- Good use was made of resources such as worksheets to support learning. In particular, very good use was made of the excellent information and communication technology (ICT) facilities.
- Good attention was given to the development of students' literacy skills in the teaching of Science. For example, time was taken to explain technical terms, word banks were used to highlight new terms, and equipment was clearly labelled with the correct names.
- An 'assessment for learning approach' was evident in the noting of the desired learning outcomes at the start of most lessons. However, greater use could have been made of the intended learning outcomes to structure the lessons and to assess the success of the lessons. Thus it is recommended that greater use would be made of the intended learning outcomes to plan the structure of lessons and to assess whether or not students had achieved these outcomes at the end of lessons.
- For the most part, the lessons were well paced and care was taken to ensure that all students progressed.
- Good practice was evident in the trialling of a variety of methods of recording mandatory practical activities with each different year groups. This experience will guide the teachers in selecting the most appropriate method for their students.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- There is very good whole-school support for the provision of Science.
- Science is a core subject and classes are of mixed ability and of an appropriate size for the completion of practical activities.
- Timetabling arrangements for Science are good as they facilitate practical activities and regular class contact.
- Initial planning is underway for the provision of science subjects in senior cycle.
- The school has excellent resources for the teaching of Science. The five laboratories have been equipped and put into use on a phased basis as they were required.
- The school is very supportive of the continuing professional development of teachers and the sharing of expertise among the staff. Teachers have engaged in peer observation and an intranet website has been developed to facilitate sharing of resources and collaborative planning within the subject department.
- The school has very good systems for tracking and monitoring students' progress.
- Students are encouraged to take part in extracurricular activities such as Science Week and the Young Scientist and Technology exhibition. A Science Club where students get an opportunity to develop their interest in science meets weekly.

PLANNING AND PREPARATION

- The quality of planning and preparation for the provision of Science is good.
- A good structure for the department has been put in place. One teacher acts as coordinator, minutes are kept of meetings, and an intranet website has been developed to support subject planning.
- The teachers work collaboratively. Common assessments are used and teachers share resources.
- Planning is carried out in a coordinated manner, both formally through regular subject department meetings and informally through ongoing liaison between teachers
- A good level of planning for health and safety issues is evident in the development of safety contracts, laboratory rules, emergency procedures, and safety checklists as part of the science plan.
- As students have progressed from first to third year and additional teachers were hired, the science plan has been under constant development and good work has been done in this regard. However, there are some areas of the plan, such as the development of schemes of work based on intended learning outcomes, which should be prioritised for future attention. In light of the increased size of the department, it is also recommended that the science department should prioritise the sharing of expertise in teaching methodologies as the focus for future subject planning. For instance, teaching methodologies could be placed on the agenda for all subject department meetings.

- Good planning for the individual lessons observed was shown in the advance preparation of relevant resources, and in the pace and structure of the lessons.

The draft findings and recommendations arising out of this evaluation were discussed with the principal and subject 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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