

An Roinn Oideachais agus Scileanna

Department of Education and Skills

**Subject Inspection of Science
REPORT**

**St Raphael's College
Loughrea, County Galway
Roll number: 63070C**

Date of inspection: 28 November 2013



**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

Dates of inspection	28 November 2013
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

- Teaching and learning were of a very high quality with very good classroom management and a very positive atmosphere as well as an appropriate variety of teaching methods used in the lessons observed.
- Students were enthusiastic and engaged in their learning, clearly making progress during each lesson.
- The provision for Science is very good with appropriate whole-school supports in place to support students in accessing the subject.
- Subject planning and lesson preparation were of a very high quality with considerable evidence of proactive, reflective and effective practices which are well-aligned with the principles of school self-evaluation (SSE).
- Very good work has been done in helping students to maximise their attainment in the Junior Certificate Science examination.

MAIN RECOMMENDATIONS

- If a formal opportunity to discuss issues related to teaching and learning within the context of the school's approach to school self-evaluation were included on all subject department meetings agendas it would further support future planning by the subject teachers.
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INTRODUCTION

St Raphael's College is a co-educational post-primary school located in the town of Loughrea, County Galway. The school's enrolment is 422 students and it offers the Transition Year programme and Leaving Certificate Vocational Programme in addition to the Junior Certificate and established Leaving Certificate programmes. During Transition Year, students have exposure to Biology, Chemistry, and Physics, all of which are offered by the school for the Leaving Certificate.

TEACHING AND LEARNING

- Lessons were well structured and sequenced. Each lesson had a logical progression and was well paced, using a variety of teaching methods to engage students and to aid their learning. Teachers provided clear leadership throughout all lessons and they dealt skilfully and expertly with the topics which they were teaching.
- Questioning was used extensively throughout lessons and it was used proficiently. It was directed in nature and teachers provided appropriate wait time to allow students to think about the question and develop their answers.
- Information and communication technology (ICT) was used extensively throughout the lessons. Its use was beneficial as it provided clear visual stimuli as well as concise explanation and exemplification of the concepts that were being studied.
- Students were engaged throughout the lessons. They listened carefully, responded to questions, volunteered ideas, completed short written exercises, practised calculations, worked in pairs, and used their drawing skills to sketch scientific diagrams. Teachers circulated around the classroom while students were working on individual or pair exercises and they provided guidance and support to students whenever it was needed. In addition, teachers used and provided appropriate resources to support the students in their learning. Good practice was particularly evident when the topics being taught were related to the students' everyday life experiences. In all of the lessons the teaching approaches which were used were successful in aiding students' learning.
- Classroom management was of a very high standard, with the atmosphere in all lessons being positive. It was evident that the students and their teachers enjoyed good relationships based on mutual respect. The students were addressed by name and there was a relaxed but purposeful feeling to the learning which was taking place.
- Correction of homework from the previous night provided the starting point for many of the lessons and this was beneficial as it helped to provide continuity from the previous lesson. It also meant that the teacher was able to identify any areas of challenge in what the students had learned and then help students to clarify any questions which they had based on applying their learning when completing their homework.
- Literacy was an element of all lessons, with an emphasis on students understanding the key scientific terms which they encountered. There was also good practice in respect of opportunities for students to pronounce new words out loud and for them to give their own explanations of scientific terms.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- There is very good provision which enables students to study science subjects throughout junior cycle and senior cycle. It was evident from documentation that arrangements for subject timetabling is based on the subject choices which students make each year and this is good practice. This curricular provision is supported by timetable allocations which fully meet the total time required to study the various syllabuses.
- Extracurricular and co-curricular activities are well supported by the science department with involvement in the Young Scientist Exhibition, Science Week, industrial visits, science quizzes, and involvement in Social, Personal and Health Education provision. The teachers' support for such activities is just one example of the level of commitment they demonstrate in their work.
- There are appropriate whole-school assessment procedures in place with students' progress assessed regularly and reports sent to parents periodically. A formal analysis of the grades that students achieve in the certificate examinations is completed each year and this is used to inform planning.
- The school provides good support for the teachers' continuing professional development by, for example, providing funding for membership of professional associations and for professional development courses and further study. Recent professional development in literacy practices, SSE, and ICT use has had an effect at the classroom level where these practices were evident.

PLANNING AND PREPARATION

- There are appropriate structures in place to support subject planning. The subject plan is a comprehensive and well-developed document which usefully informs teaching and learning practices. Appropriate records are retained at a subject department and individual level.
 - The quality of planning and preparation was very good with teachers demonstrating a very high level of subject matter expertise. Discussion with the teachers and examination of documentation showed that the science department has developed proactive, reflective and effective practices to improve students' learning and attainment. These practices are well aligned with the principles of SSE.
 - It was evident from documentation provided that the teachers have successfully supported students in achieving very high levels of success in the Junior Certificate Science examination. This is due to the diligence of the science department in its work in subject planning and delivery.
 - If a formal opportunity to discuss issues related to teaching and learning within the context of the school's approach to SSE were included on all subject department meetings agendas it would further support future planning by the subject teachers.
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The draft findings and recommendations arising out of this evaluation were discussed with the principal 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

The Board of Management of St. Raphael's is very happy with the content of the 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.

All subject departments have been asked to include a consideration of the self-evaluation process at all subject department meetings and to minute same in their records.