An Roinn Oideachais agus Scileanna

Department of Education and Skills

Subject Inspection of Science and Chemistry
REPORT

St Joseph's Secondary School
Tulla, County Clare
Roll number: 62020F

Date of inspection: 14 November 2014

AN ROINN OIDEACHAIS AGUS SCILEANNA | DEPARTMENT OF EDUCATION AND SKILLS

REPORT
ON
THE QUALITY OF LEARNING AND TEACHING IN SCIENCE AND CHEMISTRY

INFORMATION ON THE INSPECTION

Date(s) of inspection	14 November 2014
Inspection activities undertaken • Review of relevant documents • Discussion with principal and teachers • Interaction with students	• Observation of teaching and learning during five class periods • Examination of students' work • Feedback to principal and teachers

MAIN FINDINGS

- Good quality teaching was evident in all the lessons observed.
- Classroom management was of very good quality and the positive atmosphere in all lessons was underpinned by supportive relationships and high levels of support by the teachers for the students' learning.
- The students were enthusiastic about and successful in their learning, giving good quality answers to questions that were posed by their teachers and by the inspector.
- Subject planning and lesson preparation were of a high quality.
- Good quality whole-school provision for the sciences including extensive extra-curricular and co-curricular activities were evident during the evaluation.
- There has been a proactive approach to school self-evaluation and initiatives in literacy and numeracy have gained significant traction in the sciences.

MAIN RECOMMENDATIONS

- In building on the good work which has already been accomplished in school self-evaluation and subject planning the science staff should seek to embed opportunities for sharing practice and trialling initiatives within the subject planning process.
- Practical work is a beneficial element of students' experience of the sciences in this school and in building on this good practice it is recommended that the potential to undertake regular, small-scale assessment of students' practical skills be explored by the science staff.

INTRODUCTION

St Joseph's Secondary School is a co-educational voluntary secondary school under the trusteeship of Catholic Education an Irish Schools Trust (CEIST). The school's total enrolment is 458 students. In addition to the Junior Certificate and Leaving Certificate programs the school provides a Transition Year (TY) programme, the Leaving Certificate Vocational Programme and the Leaving Certificate Applied programme.

TEACHING AND LEARNING

- The teaching approaches that were used during the lessons observed spanned a range of methodologies suited to each lesson. Of particular note was the high level of individual support that teachers gave to their students. The teachers created opportunities for students to ask questions, they answered the students' questions clearly, and they circulated among the students while the students worked, providing individual guidance, support and encouragement.
- Foremost among the methodologies that were observed were teacher-led instruction and exposition, questioning, use of information and communication technology (ICT), student performance of experimental work, group work, and student note-taking. These methodologies were used well and they aided the students in achieving the lesson objectives. It was evident that an emphasis on literacy and numeracy was integrated into the teaching of each topic and this is good practice.
- It was apparent from observation that the students were meaningfully engaged in their learning during each lesson. They were attentive and participated fully in the lesson activities. They gave good quality answers to the questions posed by their teachers. In interacting with the inspector the students positively described their enthusiasm for their studies and it was clear from observing the students' work that they were motivated in their learning.
- The atmosphere during each lesson was positive and this was underpinned by supportive relationships among the students and their teachers. Each lesson was very well managed with clear lesson objectives, good pacing, and a well-planned structure.
- All experimental work was undertaken safely and there was an appropriate emphasis on health and safety. The students were competent and capable in their performance of experimental work and they showed good facility in working in the laboratory and in working as part of a team. Practical work is a beneficial element of students' experience of the sciences in this school and in building on this good practice it is recommended that the potential to undertake regular, small-scale assessment of students' practical skills be explored by the science staff.
- Samples of students' written work were viewed. These showed that homework is a regular feature of the students' learning and that it is regularly monitored by their teachers. It was clear from the students' work that their learning was progressing in a planned manner.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- There is good range of science subjects available to students in this school, with Science being a core subject at junior cycle and in TY. The level of uptake of the higher level for the Junior Certificate examination is good as it is at leaving certificate level for

Chemistry. Students are encouraged and supported by their teachers to take the subjects to the highest level possible.

- Timetabling arrangements for Science and Chemistry meet fully with the syllabus guidelines while the distribution of class periods throughout the week is satisfactory and ensures that are is an appropriate number of contact points during the week.
- Evidence of a very significant number of science-related extra-curricular and co-curricular activities was provided. The very good work done by the science staff in facilitating these activities means that the students gain exposure to learning opportunities which are both motivational and stimulating.
- The science laboratories have a strong sense of being a scientific learning space. They are clean, well maintained and bright. In particular, very good work has been done in creating kits for experimental work in Science and this has aided the performance of experimental work and the management of resources and time.
- The teachers' continuing professional development is well supported by the school and the science teachers are engaged in their own continuing professional development. Evidence was provided of a wide range of courses and professional development events which the teachers have attended and it clear that the themes from these events have been adopted by the science staff and integrated within the delivery of the sciences.

PLANNING AND PREPARATION

- The science planning documentation which was viewed was clear and comprehensive. It had been created collaboratively by the science staff. The collaborative working relationships among the teachers were supportive of their work in planning for the delivery of the sciences. It was clear from the documentation that the science staff had taken a positive, developmental approach to planning for the sciences.
- The focus for current planning has encompassed both organisational matters and pedagogical issues and this is good practice. Additionally, the school has engaged with school self-evaluation and from discussions with the teachers it was evident that they were reflective in their practices. In building on these strengths, the science department should capitalise on the good work which has already been accomplished in school self-evaluation and subject planning by embedding opportunities for sharing practice and trialling initiatives within the subject planning process.
- There was a high level of preparation for each lesson. There was clear evidence of the teachers maintaining appropriate plans. During the delivery of lessons the teachers demonstrated a high level of subject matter expertise.
- Students' progress is monitored by means of regular assessment and reported on periodically to parents. The science staff has adopted the good practice of analysing the students' results from the certificate examinations. They use the results of this analysis to inform their planning, and consequently their approaches to teaching and learning.

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.

Published March 2015