

An Roinn Oideachais agus Scileanna
Department of Education and Skills

Subject Inspection of Science and Chemistry
REPORT

Saint Joseph's CBS
Merville Avenue, Fairview, Dublin 3
Roll number: 60390F

Date of inspection: 17 September 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 CHEMISTRY**

INFORMATION ON THE INSPECTION

Dates of inspection:	16, 17 September 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 seven class periods• Examination of students' work• Feedback to principal and teachers

MAIN FINDINGS

- The quality of teaching and learning was good with exemplary practice seen in some cases.
- Lessons were very well managed with a good rapport evident in student-teacher interactions.
- The intended learning objectives were set out at the start of all lessons; however, in some cases these were used to structure lesson content rather than as an assessment strategy.
- The quality of whole-school support for the provision of science subjects is very good.
- Science is a core subject in junior cycle and Transition Year but uptake of Chemistry has fluctuated.
- The quality of planning and preparation to support the teaching of science subjects is very good.

MAIN RECOMMENDATIONS

- The teachers should collaborate to develop and share good classroom practice with respect to assessing and consolidating the intended learning outcomes of lessons.
 - Students' views should be sought in order to inform planning and promotion of Chemistry.
 - In addition to the actions being implemented at system level, teachers should also consider how classroom practice may affect student outcomes.
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INTRODUCTION

Saint Joseph's CBS is a voluntary secondary school under the trusteeship of the Edmond Rice Schools Trust. The school is included in DEIS (Delivering Equality of Opportunity in Schools), the Department of Education and Skills action plan for educational inclusion. Current enrolment is 313 students and the programmes on offer are the Junior Certificate, a compulsory Transition Year, the established Leaving Certificate and the Leaving Certificate Applied.

TEACHING AND LEARNING

- The quality of teaching and learning was good with exemplary practice seen in some cases.
- Resources were used to good effect to support learning. In particular, the very good information and communication technology (ICT) resources were used to provide lesson content in a simple, clear and visually stimulating way.
- Students' literacy needs were well supported through the use of key words, vocabulary books, and the attention given to the scientific terminology.
- Lessons were very well managed with a good rapport evident in student-teacher interactions. Students were attentive and cooperated well with their teachers throughout the lessons.
- There was good variety in the lessons. Students were engaged in listening, writing, drawing, group work, and practical work activities at various times.
- A very good hands-on experience was provided in practical activities and facilitated the development of students' laboratory skills.
- In some lessons, content was differentiated for higher and ordinary levels. Differentiation was also evident in the verbal questioning of students during lessons.
- A good range of assessment techniques was used during some lessons, including the use of mini-whiteboards, short tests and peer assessment.
- There was a strong focus on the assignment and checking of homework. Best practice was observed where formative comments were noted in the students' copy books. More widespread use could be made of this practice.
- The intended learning objectives were set out at the start of all lessons. However, in some cases these were used to simply structure lesson content. It was not clearly assessed, in most cases, what new learning had been achieved by students at the end of their lessons. Thus, it is recommended that the teachers collaborate to develop and share good classroom practice with respect to assessing and consolidating the intended learning outcomes.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- The quality of whole-school support for the provision of science subjects is very good.
- Science is a core subject in junior cycle, and in Transition Year all students study modules of Physics, Chemistry and Biology. Three science subjects are offered for the Leaving Certificate.

- Chemistry classes have been formed in fifth year for the past two years. However, uptake was insufficient in the current fifth-year group to proceed with forming a class. In order to inform planning and promotion of the subject, it is recommended that students' views on why they chose, or did not choose, Chemistry be sought. This could be done by various means such as surveys or focus groups.
- The school has two well-equipped laboratories to support the teaching of science subjects. They are well maintained and equipped appropriately with relevant safety equipment.
- The school is supportive of teachers' continuing professional development. For example, all teachers received training on assessment-for-learning methodologies at the start of the current academic year and are facilitated to attend relevant in-service events.
- It is good practice that the school arranges regular formal meetings of the subject department.
- The school has created valuable links with third-level institutions and students participate in various programmes offered by such institutions.
- Participation in extra-curricular events is encouraged. Students participate in the Young Scientist exhibition and the Green Schools initiative. Of particular note is the recent success in the All-Ireland Science Debating Issues Competition.

PLANNING AND PREPARATION

- The quality of planning and preparation to support the teaching of science subjects is very good.
- The subject department is well established, meets regularly and keeps a good record of its work. It is good practice that the role of co-ordinator is rotated among staff and that responsibility for particular actions is distributed among the team after meetings. Formal planning is supplemented by frequent ongoing collaboration among the teachers.
- A very good subject plan is in place and a systematic approach to planning is evident in the division of the plan into 'static' and 'evolving' sections. The development of subject-specific practice with respect to some whole-school issues, such as special educational needs and literacy, is commendable.
- Good practice is evident in the development of shared programmes of work for each year and the consequent implementation of common examinations across a year group.
- A very good analysis of student outcomes in certificate examinations is undertaken annually by the science department. Issues, targets, and actions are clearly identified. However, the agreed actions are generally at system level; therefore, it is recommended that the teachers also consider how classroom practice may affect student outcomes.
- The science teachers have created many useful resources to support teaching and learning. It is good practice that these are shared electronically. It is suggested that a future development could be the sharing of these resources with students.

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.

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Appendix

SCHOOL RESPONSE TO THE REPORT

Submitted by the Board of Management

Area 1: Observations on the content of the inspection report

The School Community here in St. Joseph's wholeheartedly welcomes this report and sees it as an affirmation of the excellent work carried out by a committed team.

We appreciate the recognition of the good quality of teaching and learning, the very well managed lessons, the quality of whole-school support for the provision of the subjects, and the high quality of planning and preparation in supporting the teaching of science subjects.

We also welcome the recognition of exemplary practice witnessed during the inspection, the systematic approach to planning within the science department, the very good use of ICT resources, the use of differentiation in content and verbal questioning, the good range of assessment techniques used, the strong focus on assigning and checking homework, the analysis of student outcomes in certificate examinations, the facilitation of the development of students' laboratory skills, the well-equipped and maintained laboratories, the attentiveness and cooperation of students during lessons, the encouragement of participation in extra-curricular events and the valuable links which the school has created with third-level institutions.

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

We acknowledge the recommendations in the report and we look forward to addressing and implementing them.

In particular, students' views will be sought in relation to informing planning and promotion of chemistry; greater teacher collaboration to develop and share good classroom practice with respect to assessing and consolidating the intended learning outcomes of lessons will be encouraged and teachers will be encouraged to consider how classroom practice may affect student outcomes. The acknowledged good practice whereby teachers have created many useful resources which are shared electronically could be extended to include the sharing of these resources with students.