

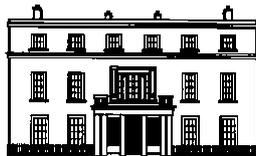
An Roinn Oideachais agus Scileanna

Department of Education and Skills

**Subject Inspection of Science and Biology
REPORT**

**St Aloysius School
Sharman Crawford Street, Cork
Roll number: 62630J**

Date of inspection: 12 March 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 AND BIOLOGY

INFORMATION ON THE INSPECTION

Date of inspection	12 March 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 five class periods• Examination of students' work• Feedback to principal, deputy principal and teachers

MAIN FINDINGS

- In the main, the quality of teaching and learning in the lessons observed was good.
- Student learning was supported through the identification of learning outcomes.
- The standard of students' written work varied.
- Classroom atmosphere was positive; lessons were very well managed by teachers with affirmation of student effort and good interpersonal relations evident.
- The school has three laboratories, a preparation and storage area, all of which are tidy and organised.
- Lessons had been well planned and prepared.

MAIN RECOMMENDATIONS

- The science team should review how students record their practical activities with reference to how the learners' skill in this area is developed over time.
 - Current resources should be audited with a view to planning for the acquisition of additional items over time.
 - Curricular documents should link topics, learning outcomes, teaching and learning methodologies, assessment strategies, resources and timeframes required.
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INTRODUCTION

St Aloysius School is an all-girls voluntary secondary school in Cork with a current enrolment of 264 students. It offers the Junior Certificate and an optional Transition Year (TY) programme. At senior cycle, students can choose between the Leaving Certificate and the Leaving Certificate Vocational Programme (LCVP).

TEACHING AND LEARNING

- In the main, the quality of teaching and learning in the lessons observed was good.
- Student learning was supported through the stating of learning outcomes at the outset of the lessons. Greater reference should be made to them throughout the lesson and at lesson summation.
- Many lessons began with a review of previous learning. The student should be more involved during this review and also during lesson summation in order to ascertain understanding.
- A range of methodologies was observed in lessons. In the main, there was a balance between teacher input and student participation. The team should explore how differentiation could be more fully utilised to aid student learning in a mixed-ability setting.
- Co-operative learning was facilitated through group work. Tasks were well organised and students conducted practical activities safely. Teachers circulated and provided help and guidance to students while completing the tasks, which is good practice. There was some use of whole-class discussion following activities which helped facilitate consolidation and extension of learning; this is to be encouraged.
- Student engagement was optimal when they were involved in an activity. In some instances, group size was dictated by the amount of equipment. Where there was less equipment, it resulted in larger groups which had the effect of reducing the potential learning experience for the student. The science team should audit current materials and equipment and plan for the acquisition of additional items that will allow for smaller groups to be engaged in practical activities.
- In most of the lessons observed, there was some attention given to the development of students' literacy, through the explanation of new vocabulary. In some instances, this vocabulary was written on the board with the learner encouraged to use and record it during the lesson. This practice should be a feature of all lessons. The development of further strategies to support literacy should be discussed by the team.
- A range of resources was used to communicate lesson content. Where information and communication technology (ICT) was used effectively, it helped to highlight salient points and provide visual images for the learner, which is to be encouraged.
- Teacher questioning was the method most often used to assess student learning. Teachers should ensure that questioning not only requires the learner to recapitulate information but also challenges them to think for themselves and apply their knowledge. Opportunities for peer correction of short tests administered during lessons should also be considered.
- In some lessons, students were required to make notes on material presented. This material was not always recorded correctly, and should be monitored by the teacher to ensure accuracy.

- Students had used a variety of approaches to the reporting of practical activities and the quality of presentation and content varied. The science team should review how students record their practical activities with reference to how the learners' skill in this area is developed over time. Regular monitoring and feedback to students on their work will aid this improvement. Extending formal assessment to include marking students' practical work as a component of school-based examinations should be explored and developed by the science team, with agreed procedures documented as part of departmental policy.
- The lessons were well managed with systems regarding attendance, homework and seating arrangements evident. There was a positive rapport between teacher and student with affirmation of student effort a feature of the lessons observed. The pace of lesson delivery, the content and time management were good.
- Homework is assigned regularly with previously assigned homework corrected during the lessons. In some instances, the oral delivery of the correct answer may also need to be written up for students to visualise. Homework was annotated by the teacher, in some cases. The inclusion of formative and directional feedback is recommended.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- Science at junior cycle is optional in the school. Students select their subjects prior to entry. Currently, a very high percentage of the students choose to study science. Senior-cycle students can avail of three science subjects with option bands created on the basis of student preferences. The system of pre-selection of subjects at junior cycle should be kept under review. Teaching time is allocated as outlined in the respective syllabuses.
- The school has three laboratories and a preparation and storage area, all of which are tidy and organised. All rooms are ICT-enabled which supports teaching and learning. Current resources should be audited with a view to planning for the acquisition of additional items over time.
- A safety statement has been devised. This should be reviewed annually with cognisance taken of recently devised official guidelines.
- Teachers' attendance at continuing professional development (CPD) events has been facilitated. Continued engagement in CPD is encouraged.
- The school has devised a homework policy. Assessment arrangements include the use of in-class assessment, homework and formal assessments. Teachers retain records of all assessments, which is good practice.
- The current work in developing cross-curricular linkages between other subjects and the sciences should continue. Participation in Science Week, The Young Scientist Competition, various quizzes, numerous field trips and the hosting of visiting speakers all contribute to the learning experience of the student. The commitment of the science team in this regard is acknowledged.

PLANNING AND PREPARATION

- A co-ordinator has been appointed. The position is rotated among the team. Formal departmental meetings are held each term, to deal with administrative issues, laboratory access and organisation of trips, events and assessment. The practice of formally recording minutes from these meetings should be adopted by the team. Through self-evaluation, the

team could identify areas for future planning, which could be compiled into a time-bound action plan.

- Subject planning has resulted in the development of programmes of work for the sciences and the scientific module taught in TY. The science team should link topics, learning outcomes, teaching and learning methodologies, assessment strategies, resources and timeframes required, in their curricular documents.
 - Lessons had been well planned and prepared.
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The draft findings and recommendations arising out of this evaluation were discussed with the principal, deputy principal and subject teachers 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 welcomes the findings of the inspection report and is supportive of the responsibilities and work of the Science department. In particular, the Board welcomes the observations on the quality of teaching and learning observed in classes and the positive rapport that exists between teachers and students.

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 of Management have requested the Science department to carry out an audit of current resources with a view to updating equipment as required.

The policy of including the assessment of student's practical work as part of Christmas and summer exams will now become Science department policy.