

**An Roinn Oideachais agus Scileanna**  
**Department of Education and Skills**

**Subject Inspection in Science and Agricultural Science**

**REPORT**

|   |                          |
|---|--------------------------|
| <b>Ainm na scoile /<br/>School name</b>       | Cistercian College       |
| <b>Seoladh na scoile /<br/>School address</b> | Roscrea<br>Co. Tipperary |
| <b>Uimhir rolla /<br/>Roll number</b>         | 65410K                   |

**Date of Inspection: 07-05-2019**



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**An Roinn Oideachais  
agus Scileanna**  
Department of  
Education and Skills

## **SUBJECT INSPECTION**

Subject Inspections report on the quality of work in individual curriculum areas within a school. They affirm good practice and make recommendations, where appropriate, to aid the further development of the subject in the school.

### **HOW TO READ THIS REPORT**

During this inspection, the inspector evaluated learning and teaching in Agricultural Science & Biology under the following headings:

1. Teaching, learning and assessment
2. Subject provision and whole-school support
3. Planning and preparation

Inspectors describe the quality of each of these areas using the Inspectorate's quality continuum which is shown on the final page of this report. The quality continuum provides examples of the language used by inspectors when evaluating and describing the quality of the school's provision in each area.

## **CHILD PROTECTION**

During the inspection visit, the following checks in relation to the school's child protection procedures were conducted:

1. The name of the DLP and the Child Safeguarding Statement are prominently displayed near the main entrance to the school.
2. The Child Safeguarding Statement has been ratified by the board and includes an annual review and a risk assessment.
3. All teachers visited reported that they have read the Child Safeguarding Statement and that they are aware of their responsibilities as mandated persons.

The school met the requirements in relation to each of the checks above.

## SUBJECT INSPECTION

### INSPECTION ACTIVITIES

|  |   |
|--|---|
| <b>Date of inspection</b>  | 07-05-2019  |
| <b>Inspection activities undertaken</b> <ul style="list-style-type: none"><li>• Review of relevant documents</li><li>• Discussion with principal and key staff</li><li>• Interaction with students</li></ul> | <ul style="list-style-type: none"><li>• Observation of teaching and learning during four class periods</li><li>• Examination of students' work</li><li>• Feedback to principal and relevant staff</li></ul> |

### School context

Cistercian College, Roscrea, is a fee-charging boys' post-primary school under the trusteeship of the Cistercian order. There are currently 193 boys enrolled. Curriculum provision includes the Junior Cycle, an optional Transition Year (TY) programme, and the Leaving Certificate.

### SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:

#### Findings

- The quality of teaching and learning was good, or very good, in the lessons observed; occasionally elements of satisfactory teaching were evident.
- Differentiation practices largely focused on individual help, provided while teachers moved around the classroom and, on a few occasions, through the use of differentiated questioning.
- Oral feedback to students in class was good; however, written feedback, on students' written work, was largely absent.
- Whole-school support for Science and Agricultural Science is good: the science teachers and senior management provide good support for extra-curricular activities such as participation in SciFest.
- Very good schedules for course delivery in Science and Agricultural Science have been completed.
- Outcomes in certificate examinations have been analysed, but this work has not yet been used to plan for improvement.

#### Recommendations

- Differentiation strategies should be further developed, for example through the use of differentiated learning outcomes.
- Teachers should agree and set standards for the quality of presentation and content of students' written work and provide them with written formative feedback on their work.
- The planning documents for Agricultural Science should be updated over time to reflect the new syllabus.
- The science department should use data from a range of sources to devise and implement an evidence-based improvement plan.

## DETAILED FINDINGS AND RECOMMENDATIONS

### 1. TEACHING, LEARNING, AND ASSESSMENT

- The quality of teaching and learning was good or very good in the lessons observed; occasionally elements of satisfactory teaching were evident.
- All the lessons observed were well planned and prepared and the required resources had been prepared in advance and were to hand.
- The lessons were well structured. A clear opening phase was evident where learning outcomes were shared with students, although in some lessons these could have been emphasised to a greater extent.
- Lesson content was developed in a logical sequence, using appropriate teaching methodologies; and the lesson was reviewed at the close. In some cases, this review was accompanied by references to the learning objectives, emphasising the learning that had taken place.
- A variety of active, student-centred teaching methodologies were evident in the lessons. All the lessons were very interactive and students were encouraged to contribute, which they did very well. Their contributions were affirmed and used to progress the lessons.
- Students were given good opportunities to work in pairs and provide feedback to the whole class following their discussions, but on occasion the group work was basic and lacking in structure. Students should be assigned roles within their groups and given clear instructions to follow, to maximise learning opportunities.
- Teachers had high expectations of students and, in the best lessons, the level of challenge was appropriate. There was a good rapport between teachers and students and this enabled the students to engage positively in the teaching and learning process. Overall, there was a very good balance between teacher-led and student-centred stages in the lessons.
- Assessment was mostly achieved through questioning strategies. Some very good questioning was evident, with a mixture of lower-order questions, assessing recall, and higher-order questions, testing students' level of understanding.
- In the best lessons, good classroom management ensured that the teacher maintained control of the interactions. This was done by encouraging students to think before putting their hands up to respond to a question or make a contribution to the lesson; and by encouraging students to listen to both the teacher and their peers when not making their own contributions.
- Teachers circulated well during the lessons, assessing and supporting students as required. Differentiation practices largely focused on individual help, provided while moving around the classroom and, on a few occasions, the use of differentiated questioning. However, there is scope to further develop differentiation strategies to challenge the better-able students while providing support for students who may be struggling, for example through the use of differentiated learning outcomes.
- Oral feedback to students in class was good. However, written feedback to students was largely absent, with one exception. Teachers should agree and set standards for the quality of presentation and content of students' written work and provide them with written formative feedback to encourage improvement.

- In order to facilitate teachers to provide written feedback to students, teachers should, where necessary, create opportunities for students to present extended written exercises by giving them appropriate assignments to complete.

## **2. SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT**

- Whole-school support for Science and Agricultural Science is good. Science is a core subject for junior cycle students and a full choice of science-based subjects in on the senior cycle curriculum.
- The time allocated to the subjects is in keeping with syllabus recommendations.
- Laboratory access is very good and all science lessons are laboratory based.
- Available continuing professional envelopment opportunities have been availed of by teachers and supported by senior management.
- Provision of information and communications technology is very good and, in the lessons observed, well used to provide good visual and other support to students.
- The science teachers and senior management provide good support for extra-curricular activities to broaden students' experience of the sciences, especially, for example, the school's growing participation in SciFest and the valuable Agricultural Science visits to out-of-school sites.
- Chemicals are generally safely stored in a preparation room, shared by two laboratories. It is recommended that the use of the colour-coded system be updated.

## **3. PLANNING AND PREPARATION**

- There is very good collegiality and mutual support evident amongst the science teachers. Although one teacher fulfils the role of science co-ordinator, most of the functions of running the science department are shared amongst the science team.
- Very good schedules for course delivery have been completed by the members of the science department. Common schemes are followed in both Science and Agricultural Science and outcomes for students in certificate examinations are good.
- It is recommended that the upcoming introduction of the revised syllabus in Agricultural Science be used as an opportunity to update the planning documents to include additional information such as teaching and assessment details, as has been done with the junior science schedule.
- Outcomes in certificate examinations have been analysed but this work has not yet been used to plan for improvement. It is recommended that the science department members make use of data from a range of sources to identify strengths and areas for improvement, and devise and implement an evidence-based improvement plan, with specific desired outcomes.

The draft findings and recommendations arising out of this evaluation were discussed with the principal, deputy principal and the subject teachers at the conclusion of the evaluation.

The board of management of the school was given an opportunity to comment on the findings and recommendations of the report; the board chose to accept the report without response.

## THE INSPECTORATE'S QUALITY CONTINUUM

Inspectors describe the quality of provision in the school using the Inspectorate's quality continuum which is shown below. The quality continuum provides examples of the language used by inspectors when evaluating and describing the quality of the school's provision of each area.

| Level               | Description   | Example of descriptive terms  |
|---------------------|---|---|
| <b>Very Good</b>    | <b>Very good</b> applies where the quality of the areas evaluated is of a very high standard. The very few areas for improvement that exist do not significantly impact on the overall quality of provision. For some schools in this category the quality of what is evaluated is <b>outstanding</b> and provides an example for other schools of exceptionally high standards of provision. | Very good; of a very high quality; very effective practice; highly commendable; very successful; few areas for improvement; notable; of a very high standard. Excellent; outstanding; exceptionally high standard, with very significant strengths; exemplary |
| <b>Good</b>         | <b>Good</b> applies where the strengths in the areas evaluated clearly outweigh the areas in need of improvement. The areas requiring improvement impact on the quality of pupils' learning. The school needs to build on its strengths and take action to address the areas identified as requiring improvement in order to achieve a <i>very good</i> standard.                             | Good; good quality; valuable; effective practice; competent; useful; commendable; good standard; some areas for improvement   |
| <b>Satisfactory</b> | <b>Satisfactory</b> applies where the quality of provision is adequate. The strengths in what is being evaluated just outweigh the shortcomings. While the shortcomings do not have a significant negative impact they constrain the quality of the learning experiences and should be addressed in order to achieve a better standard.   | Satisfactory; adequate; appropriate provision although some possibilities for improvement exist; acceptable level of quality; improvement needed in some areas  |
| <b>Fair</b>         | <b>Fair</b> applies where, although there are some strengths in the areas evaluated, deficiencies or shortcomings that outweigh those strengths also exist. The school will have to address certain deficiencies without delay in order to ensure that provision is satisfactory or better.   | Fair; evident weaknesses that are impacting on pupils' learning; less than satisfactory; experiencing difficulty; must improve in specified areas; action required to improve   |
| <b>Weak</b>         | <b>Weak</b> applies where there are serious deficiencies in the areas evaluated. Immediate and coordinated whole-school action is required to address the areas of concern. In some cases, the intervention of other agencies may be required to support improvements.  | Weak; unsatisfactory; insufficient; ineffective; poor; requiring significant change, development or improvement; experiencing significant difficulties;   |