

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

Subject Inspection in Science & Biology

REPORT

School name	Clongowes Wood College
School address	Clane Co Kildare
Roll number	61720F

Date of Inspection: 09-05-2017



WHAT IS A 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 Science & Biology under the following headings:

1. Learning, teaching 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.

Subject Inspection

INSPECTION ACTIVITIES DURING THIS INSPECTION

Date of inspection	09-05-2017
Inspection activities undertaken <ul style="list-style-type: none">• Review of relevant documents• Discussion with principal and key staff• Interaction with students	<ul style="list-style-type: none">• Observation of teaching and learning during three class periods• Examination of students' work• Feedback to principal and relevant staff

SCHOOL CONTEXT

Clongowes Wood College, a boys' post-primary boarding school in the Jesuit tradition, currently caters for 446 students. The school offers the Junior Certificate, Leaving Certificate and a compulsory Transition Year (TY).

SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:

FINDINGS

- The quality of both teaching and learning in the lessons observed was very good at all times.
- Appropriate student-centred, active-learning methodologies predominated in all the lessons.
- Provision and support from school management for the sciences is very good.
- There are extensive systems in place to monitor and assess students' academic progress and support them where necessary.
- There is a high level of collegiality and mutual support amongst the members of the science department.

RECOMMENDATIONS

- Written developmental feedback should be provided on students' work, to indicate its value and to facilitate further improvement.
- Planning for improvement should be formalised and evidence based to a greater extent, targets should be set and actions to achieve them should be described.

DETAILED FINDINGS AND RECOMMENDATIONS

1. TEACHING, LEARNING AND ASSESSMENT

- The quality of both teaching and learning in the lessons observed was very good at all times.
- All the lessons were well prepared and required resources were in place.

- Lessons, which were well structured, generally opened with a short review of previous learning followed by sharing of the learning intention, a developmental phase and a review at the end to consolidate learning. Homework was assigned at the close of all the lessons.
- Appropriate student-centred, active-learning methodologies predominated in all the lessons.
- Students were very well challenged by their teachers and an investigative approach was evident in each of the lessons observed.
- Some very good quality questioning was noted, ranging from simpler lower-order questions to more challenging higher-order questions. In almost all classes, questions were directed to named students but an occasional tendency to allow chorus answering should be discouraged. Likewise, a tendency to focus more on students closer to the teacher should be avoided.
- The level and quality of teacher-student interaction in all the lessons was very high and students were facilitated to make significant contributions to lessons. These contributions were welcomed and affirmed by teachers and used to assist in further developing lesson content.
- Teachers moved very well amongst students, questioning, monitoring and assessing them and providing any assistance required. This movement facilitated the good level of differentiation that was observed, especially during the practical activities that took place in each lesson.
- Practical work was safely and efficiently carried out in all lessons, with appropriate plenary sessions in advance and following the activities, to prepare students and to review and rationalise outcomes.
- Students' written work is acknowledged and affirmed by teachers. There is a need, however, to provide written developmental feedback on this work, to indicate its value and to facilitate further improvement.
- Students engaged very well in the learning process and worked hard in all lessons, demonstrating very good evidence of their learning. Their level of knowledge and understanding, when questioned by the inspector, was very good, as was their ability to think and reason out problems.

2. SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- Provision and support from school management for the sciences is very good. Science is a core subject in junior cycle and in TY and the sciences are a significant element of the senior cycle curriculum.
- The allocation of time to the sciences meets or exceeds syllabus recommendations.
- The quality of the science laboratories and ICT infrastructure is very good and these facilities are very well used.
- It is recommended that chemical storage be reviewed and a colour-coded system adopted to further enhance current safety procedures.
- Very good support is provided for a variety of co-curricular and extra-curricular activities to broaden and enhance students' experience of the sciences.
- There are extensive systems in place to monitor and assess students' progress and support them where necessary, and to report on their progress.
- School management provides very good support for teachers' continuous professional development, and this support is availed of the best extent possible.

3. PLANNING AND PREPARATION

- The quality of planning and preparation was very good.
- There is a high level of collegiality and mutual support amongst the members of the science department.
- The science department folder is comprehensive and contains, inter alia, references to literacy and numeracy strategies, and detailed schedules for the delivery of all courses.
- Each section of the junior science course is taught by a subject-specialist teacher and common assessments are used whenever possible.
- The school's high-quality certificate examination results are analysed and summary reports are provided for school management. Plans for improvement are outlined in these reports. These plans should be formalised and evidence based to a greater extent, targets should be set and actions to achieve them should be described.

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.

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
Very Good	Very good 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 outstanding 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
Good	Good 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
Satisfactory	Satisfactory 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
Fair	Fair 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
Weak	Weak 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;

Appendix

School response to the report

Submitted by the Board of Management

Part A: Observations on the content of the inspection report

The Board welcomes the final inspection report and its findings. It is particularly satisfied that the high standards achieved in teaching, learning and assessment have been affirmed by this process. We note with great pleasure the reference to “a high level of collegiality” among members of the science department.

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

- There will be greater focus on providing written developmental feedback on students' work as recommended.
- There will be greater focus on evidence-based data in the subject improvement plan and on the actions necessary to achieve targets.
- A colour-coded system for chemical storage will be introduced to enhance current safety procedures.