

An Roinn Oideachais agus Scileanna
Department of Education and Skills

**Subject Inspection in Science & Biology & Agricultural
Science**

REPORT

Ainm na scoile / School name	Mountrath Community School
Seoladh na scoile / School address	Dysartbeigh Mountrath Co. Laois
Uimhir rolla / Roll number	91550B

Date of Inspection: 26-01-2017



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 & Agricultural Science 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

Dates of inspection	25 & 26 January 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 eleven class periods• Examination of students' work• Feedback to principal and relevant staff

SCHOOL CONTEXT

Mountrath Community School has a current enrolment of 774 students who come from a wide variety of socio-economic backgrounds. An optional Transition Year programme is included on the school's curriculum.

SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:

FINDINGS

- The quality of teaching and learning in the lessons observed ranged from satisfactory to very good.
- Students' in-class efforts were praised by teachers but their written work was not affirmed to the same extent.
- The quality of curricular provision is very good.
- The quality of planning and preparation in most instances was good.
- The members of the science department carry out an analysis of certificate examination outcomes.

RECOMMENDATIONS

- Teachers should, to a greater extent, provide developmental feedback to students, in writing, on their written work.
- Appropriate first aid and safety equipment should be readily accessible in all laboratories and safety notices should be more visible.
- Collaborative subject planning should be extended to include a greater focus on the new junior cycle science specification and on the active learning approaches underpinning it.
- All teachers should engage in comprehensive record keeping, to include records of attendance, achievement profiles for each student and a record of progress made in curriculum delivery.
- In order to progress work of the science department, targets for improvement and strategies to achieve them should now be agreed and implemented.

DETAILED FINDINGS AND RECOMMENDATIONS

1. TEACHING AND LEARNING

- The quality of teaching and learning in the lessons observed ranged from satisfactory to very good, with examples of very good practice frequently in evidence. The quality of students' learning was good to very good.
- All observed lessons were well prepared, with all required resources prepared and to hand.
- Lessons were well structured and well sequenced. However, the learning intentions, while clear, could have been shared and emphasised to a greater extent in order to scaffold learning and to provide a basis for review at the end of the lesson.
- A good variety of appropriate teaching methodologies was used and lessons were well paced.
- There was a very good rapport between teachers and students in the lessons observed and this facilitated the very good quality interactions that were frequently observed.
- Some examples of very good use of questioning were observed, with an appropriate balance between lower-order and high-order questions which encouraged students to think at a deeper level.
- Students engaged very well with the teaching and learning process. They were well challenged by their teachers and they made significant contributions to lessons. These contributions were both sought and welcomed by teachers, demonstrating and putting their learning into practice.
- Teachers circulated well around the classrooms, assessing students and keeping them on track and providing support to them as necessary. It was through a combination of such movement and good quality questioning that differentiation was largely achieved.
- Teachers were very affirming of students' in-class efforts. However, there is a need to affirm students' written work to a greater extent, and, in some instances, to provide developmental feedback to a greater extent.
- In some year groups, students should be given more extended writing exercises to complete, for example reports, research work and questions. This approach will support independent self-directed learning and give teachers opportunities to provide improvement-oriented written feedback to students.
- Practical work was safely and efficiently managed and students demonstrated good skills.
- Support for students' literacy development was very good and the range of supports and interventions observed should serve very well as a basis for the further development of the school's literacy strategy.

2. SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- The quality of provision is very good. Science is a core subject in junior cycle and TY, and senior cycle students have timetabled access to the full range of curricular science subjects. Timetabling arrangements for the subjects are also good.
- Laboratory access for students is both well managed and timetabled.
- Storage of chemicals is in accordance with good practice. All laboratories should, however, have appropriate and accessible first-aid facilities, safety equipment and greater visibility of

student safety notices. The science department has undertaken to make the necessary adjustments.

- The safety statement requires review and updating. In keeping with good practice, the safety statement should be reviewed annually.
- Regular formal assessment of students takes place and there is an appropriate system of reporting on students' progress to parents.
- Continuing professional development has been well supported by school management and availed of by teachers.
- The members of the science department provide a variety of co-curricular and extra-curricular activities in order to develop and extend students' curricular experiences and promote the sciences.
- In the ongoing drive to further promote the science subjects within the school, additional displays of students' work and science materials in the laboratories and adjacent corridors would make for a more vibrant learning environment.

3. PLANNING AND PREPARATION

- The quality of planning and preparation for the subjects in most instances was good. A collegial and collaborative approach is undertaken to subject department planning. The delivery of all courses is in accordance with common schedules, thereby facilitating the provision of common assessments.
- Building on this good practice, it is recommended that the department adds further emphasis to teaching and learning on the agenda of science meetings, with a view to formalising the sharing of effective practices. Furthermore, in the context of syllabus reform, collaborative subject planning should also be extended to include a greater focus on the new junior cycle science specification and on the active learning approaches underpinning it.
- There was evidence of record keeping by most of the teachers, including examples of comprehensive attendance and achievement profiles for each student and a record of progress made in curriculum delivery. Such information provides useful evidence in communicating student progress to parents, in providing advice to students and in monitoring progress in the completion of courses. To ensure consistency across the department, all teachers should engage in such comprehensive record keeping.
- There is some scope to enhance the management structure of the department to facilitate necessary organisational tasks and work towards improvement. This would ensure consistency both in terms of the implementation of best practice within the department and of the quality of service offered to students.
- An analysis of state examination results suggests solid performance in certificate examinations. In order to build on the analyses of examination outcomes carried out by the department, targets for improvement and strategies to achieve them should now be agreed and implemented. This would affirm the existing strategies that have benefited students and help to identify any further actions that might be needed to support continued improvement.

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 was given an opportunity to comment in writing on the findings and recommendations of the report; a response was not received from the board.

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 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;