

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

**Subject Inspection in Science & Biology**

**REPORT**

<b>Ainm na scoile / School name</b>	Meán Scoil Muire
<b>Seoladh na scoile / School address</b>	5 St. Joseph's Road Longford Town Co. Longford
<b>Uimhir rolla / Roll number</b>	63760E

**Date of Inspection: 24-01-2019**



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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 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>Dates of inspection</b>	23 & 24-01-2019
<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 eleven class periods</li><li>• Examination of students' work</li><li>• Feedback to principal and relevant staff</li></ul>

### School context

Meán Scoil Mhuire operates under the trusteeship of CEIST. There are currently 530 girls enrolled in the school and these come from a wide variety of backgrounds. Science is a core subject in junior cycle and Biology, Chemistry, Physics and Agricultural Science are offered as optional subjects in senior cycle. A range of modules in the sciences is included in the school's optional Transition Year (TY) programme.

### SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:

#### Findings

- The quality of teaching and learning ranged from good to very good in the lessons visited.
- Provision for the sciences is very good.
- Effective Science and Biology departments are in place and curricular planning is very good.
- The quality of planning and preparation is very good.
- Outcomes in certificate examinations have been analysed in a long-term longitudinal study but evidence-based planning for improvements is at an early stage.

#### Recommendations

- Planning for stated improvements, on the basis of evidence from the longitudinal study and other evidence, should now commence, with clear targets for improvement for specific sub-groups of students in both Science and Biology.

## DETAILED FINDINGS AND RECOMMENDATIONS

### 1. TEACHING, LEARNING, AND ASSESSMENT

- The quality of teaching and learning ranged from good to very good in the lessons visited.
- Lessons were well planned and prepared and all required resources were to hand.
- Classroom management was very good in all the lessons.
- Students engaged very positively in the learning process and they made significant contributions in many of the lessons. Their behaviour was excellent at all times.
- Lessons were well structured. Learning intentions were appropriately shared at the beginning, on occasion in a very imaginative manner, which helped to motivate students and set high expectations for the quality of participation and learning. In some of the lessons, these intentions were referenced again as the lesson progressed, providing a sense of achievement to students and encouraging self-assessment.
- Teachers developed lesson content very well, using appropriate teaching methodologies and students were generally well challenged. Learning was effectively reviewed at the close of almost all lessons.
- Teaching methodologies were predominantly student centred and promoted active involvement of students in their learning.
- The quality of interactions in the classrooms was very good in almost all lessons. Students were provided with many opportunities to engage at a deeper level and to display and use their learning, giving teachers opportunities to assess their level of understanding.
- Some very good questioning of students was observed but, at times, the greater use of directed questions would have enhanced learning and provided additional feedback to teachers on students' progress.
- Teachers circulated well around the classrooms, monitoring and assessing students, and supporting them as necessary. Most differentiation was achieved in this way and it is suggested that this be extended through the use of differentiated learning outcomes.
- Teachers were affirming of students efforts in class and the quality of assessment was very good. A range of Assessment for Learning techniques was well used by teachers in many of the lessons but with some opportunity for a more consistent approach overall.
- Exemplary written developmental feedback was provided to students on their written work by some teachers. However, there is scope for other teachers to engage in this provision to a greater extent.
- Teachers' attention to students' literacy development was very good and keywords were appropriately highlighted in all lessons, with emphasis on their pronunciation, meaning and proper use.
- Practical work was safely and efficiently managed and good quality whole-class plenary sessions were held in advance to ensure that all students were fully briefed on the tasks ahead of them. Their work was reviewed in a similar manner following the bench work and results were discussed and analysed, thus consolidating their learning.
- The quality of consolidation and reinforcement of learning was very good in most lessons and students displayed very good evidence of learning.

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

- Provision for the sciences is very good. Science is a core subject in junior cycle and in the optional TY. A full range of science-based subjects is provided in senior cycle.
- The time allocated to Science and Biology is in keeping with syllabus requirements.
- The school's two laboratories are well maintained and well used. A variety of charts and posters, including student work, was displayed on the laboratory walls, creating a focussed, print-rich environment, to support learning in the sciences. A neat and well stocked preparation room is shared by the laboratories.
- Teachers support the provision of a wide variety of co-curricular and extra-curricular activities in the sciences and students benefit greatly from these.
- Extensive opportunities for continuing professional development have been facilitated by school management and availed of by teachers. It is very positive that some of the science teachers are members of the Irish Science Teachers Association.
- There is a good system in place for formal assessment of students' progress and of reporting to their homes. This has been positively adapted in recent years to take account of the timing and workload of the classroom-based assessments for both students and teachers in junior cycle.

## **4. PLANNING AND PREPARATION**

- The quality of planning and preparation is very good and is reflected in the quality of the lessons observed.
- Effective Science and Biology departments are in place, each ably led in a proactive and thoughtful manner. The effective use of social media and other technologies to maintain good communications and to assist in planning is positively noted.
- Department records indicate the range of matters that are considered and managed, including pedagogical, curricular and assessment issues as well as housekeeping matters relevant to keeping a busy department working efficiently.
- Curricular planning is very good and common schedules for the delivery of courses have been prepared and implemented, facilitating common assessments to the greatest degree possible.
- Outcomes in certificate examinations have been analysed in a long-term longitudinal study carried out by the departments. It is now timely to build on this study by planning for stated improvements on the basis of evidence from the study. There should be clear targets for improvement for specific sub-groups of students in both Science and Biology. Additional evidence from in-house assessments should also be used to support improvement planning.

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 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
<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;

# **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 and recommendations outlined in the recent subject inspection of Science and Biology.

The Board is very pleased that the quality of teaching, learning & assessment was reported from good to very good. The Board recognises that the Science and Biology Departments work exceptionally hard to support their students through their engagement in planning & preparation in addition to co-curricular and extra-curricular activities. The Board is also pleased to see that the quality of student & teacher interactions in the classrooms is noted as very good.

## **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 welcomes the recommendations set out in the inspection report as a means of enhancing the existing very good practice of the Science & Biology Departments. The teachers have commenced the examination of their existing longitudinal studies with a view to developing targets for specific cohorts in Science & Biology