

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

**Subject Inspection in Science, Biology and Agricultural
Science**

REPORT

Ainm na scoile / School name	Moyne Community School
Seoladh na scoile / School address	Moyne Co Longford
Uimhir rolla / Roll number	91436D

Date of Inspection: 07-12-2017



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 and Agricultural Science 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.

SUBJECT INSPECTION

INSPECTION ACTIVITIES

Dates of inspection	06 and 07-12-2017
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

Moyne Community School, under the trusteeship of the Bishop of Ardagh and Clonmacnois and Longford and Westmeath Education and Training board, opened in 1974. The school, which is a co-educational post-primary school with a current enrolment of 638 students, provides an optional Transition Year (TY) programme.

SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:

Findings

- The quality of teaching and learning ranged from satisfactory to very good, with the majority of lessons in the good or very good category.
- Active-learning methodologies were well balanced with teacher-led stages in the lessons.
- Many good examples were observed of the use of assessment for learning techniques.
- Whole-school provision for the sciences is very good.
- The quality of planning and preparation as observed was good.
- Substantial work has occurred recently to support the implementation of the new junior cycle science specification.

Recommendations

- There is significant scope to provide more developmental written feedback to students on their written work.
- Consideration should be given to further developing students writing skills, and their report-writing skills in particular, by the provision of occasional extended written exercises
- Data from analyses of outcomes in certificate examinations, and from other sources, should underpin an evidence-based improvement programme.

DETAILED FINDINGS AND RECOMMENDATIONS

1. TEACHING, LEARNING, AND ASSESSMENT

- The quality of teaching and learning ranged from satisfactory to very good, with the majority of lessons in the good or very good category. Examples of very good teaching were frequently observed in almost all lessons.
- All the lessons observed were well prepared and were well structured. All required resources were to hand and their use was seamlessly integrated into the lessons.
- A clear opening phase when learning intentions were appropriately shared with students was evident in each lesson. This was followed by a developmental stage where new learning was facilitated and where students were given opportunities to put their learning into practice. Lessons closed with a review of the new learning.
- The good practice of reviewing the lesson in terms of the learning intention was observed in a number of lessons and, in one lesson, the learning intentions were revisited on several occasions during the lesson. This served to reinforce learning and, overall, the level of consolidation was very good
- While active-learning methodologies predominated, these were well balanced with teacher-led stages in the lessons and teaching was carried out in a very student-centred manner.
- Pair work and group work were frequently used to engage students and to encourage them to take responsibility for their own learning. The activities assigned were meaningful, which helped to motivate and engage students although, on occasion, more support and scaffolding of the task was needed to ensure that appropriate learning was optimised.
- The effective use of information and communications technology to engage students and support their learning was observed frequently during the evaluation.
- High expectations of students were apparent. Students were well motivated and engaged very well in the learning process. Classroom management was good to very good.
- Students were well challenged by their teachers. In most lessons, questioning of students was of a good quality, with an appropriate mix of lower-order, testing recall, and more challenging higher-order questions, testing students' understanding. In the best instances, students were encouraged to put their hands up before a respondent was chosen and there is scope for greater use of this technique.
- Students engaged very well with their teachers and fellow students and made significant contributions in almost all lessons.
- Practical work was carried out in a safe and efficient manner. Students were well prepared through very useful plenary sessions and were debriefed following the practical work, to rationalise results and to ensure that learning was consolidated.
- For the most part, the development of students' literacy and numeracy skills was not overtly evident in the classrooms visited. It is recommended that the implementation of the school's literacy and numeracy policies, developed in the school self-evaluation process, be reviewed.
- Teachers circulated well throughout the classrooms, assessing students' progress and providing support to them as necessary. Most differentiation was achieved in this manner.
- Assessment of students' progress was carried out by a variety of means and many good examples were observed of the use of assessment for learning techniques.

- Teachers provided students with very good oral feedback on their efforts in class. Homework was monitored, but there is significant scope to provide more developmental written feedback to students on their written work.
- Consideration should be given to further developing students' writing skills, and their report-writing skills in particular, by the provision of occasional extended written exercises.

2. SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- Whole-school provision for the sciences is very good. Science is a core subject in junior cycle and all the science subjects are on the senior cycle curriculum. Modules in Biology, Chemistry and Physics are on the TY curriculum. It is suggested that a means of including Agricultural Science in TY be considered.
- Timetabling arrangements for Science, Biology and Agricultural Science are in keeping with syllabus recommendations.
- Co-curricular and extra-curricular provision is good and students are offered opportunities to engage in a range of activities to support and enhance their learning.
- Teachers' continuing professional development is well supported and science staff have all recently engaged with training, provided by Junior Cycle for Teachers, for the junior cycle science specification. In-school management also supports teachers' membership of the Irish Science Teachers' Association and the Irish Agricultural Science Teachers' Association.
- Best use is made of laboratory facilities, which are well maintained. Some good displays of charts and posters are in evidence in the laboratories and in the classrooms used when laboratory time is unavailable. It is recommended that displays in the corridor outside the laboratories are used to promote the sciences also.
- A comprehensive system of assessing students' progress and reporting to their homes is in place and there is a very good system of maintaining communication with students' parents.

3. PLANNING AND PREPARATION

- The quality of planning and preparation as observed was good. The level of collegiality amongst the members of the science team is good and much collaboration in the development of the science plan is evident.
- Teachers have prepared common schemes of work and these have been adapted by individual teachers to meet their needs. Common assessments, based on the common schedules, are used as much as possible. This work is enabled by regular meetings of the science department.
- Planning documents and resources are available to all teachers on a shared folder in the school's computer system.
- Planning documents indicate substantial work has occurred recently to support the implementation of the new junior cycle science specification.
- The science team carries out an annual analysis of outcomes in certificate examinations. Evidence from this and from ongoing analyses of outcomes in in-house assessments should be used to identify strengths and areas for improvement. Action planning to achieve stated improvements should be documented, implemented and reviewed in the light of outcomes. Clear targets for improvement should be set.

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 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
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;