Curriculum Evaluation

Science

REPORT

<table>
<thead>
<tr>
<th>Aínm na scoile / School name</th>
<th>Scoil Náisiúnta Mhuire Gan Smál</th>
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<tr>
<td>Seoladh na scoile / School address</td>
<td>Townparks</td>
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<tr>
<td></td>
<td>Lifford</td>
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<td></td>
<td>County Donegal</td>
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<td>Uimhir rolla / Roll number</td>
<td>18076J</td>
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Date of inspection: 29-11-2018
WHAT IS A CURRICULUM EVALUATION?

Curriculum Evaluations report on the quality of teaching and learning in specific subjects of the *Primary School Curriculum* (1999). 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 under the following headings:

1. Quality of pupils’ learning
2. Supporting pupils’ learning through learner experiences and teachers’ practice
3. The effectiveness of school planning, including SSE, in progressing pupils’ learning

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.

The board of management 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.

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.
Curriculum Evaluation

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<thead>
<tr>
<th>Date of inspection</th>
<th>29-11-2018</th>
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<tr>
<td><strong>Inspection activities undertaken</strong></td>
<td><strong>Observation of teaching and learning</strong></td>
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<tr>
<td>Discussion with principal and teachers</td>
<td>Examination of pupils’ work</td>
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<td>Review of relevant documents</td>
<td>Interaction with pupils</td>
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<tr>
<td>Pupil focus-group interview</td>
<td>Feedback to principal and teachers</td>
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**SCHOOL CONTEXT**

Scoil Náisiúnta Mhuire Gan Smál is a co-educational primary school under the patronage of the Catholic Bishop of Derry. The school has five mainstream class teachers, two special education teachers and a home-school-community liaison (HSCL) co-ordinator. The school participates in Delivering Equality of Opportunity in Schools (DEIS), an action plan of the Department of Education and Skills for educational inclusion. It also receives support from the School Completion Programme (SCP). Currently there are ninety-five pupils enrolled in the school.

**SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:**

**FINDINGS**

- The quality of the pupils’ learning in Science is good; there is scope to develop the specific target language of Science.
- The quality of pupils’ learning experiences are good; all pupils are enabled to work as scientists and to research collaboratively.
- Teaching in Science is of a high standard; teachers facilitate purposeful and progressive learning in Science.
- The quality of assessment in Science is satisfactory; all pupils are not enabled to reflect constructively on their own learning.
- The quality of whole-school planning is satisfactory; the draft review of the Science plan requires further detail.

**RECOMMENDATIONS**

- Teachers should ensure that they plan for and explicitly teach subject-specific vocabulary and enable pupils to use this language fluently and independently.
- The school should agree and implement a whole-school approach for assessing and recording pupils’ progress in Science.
- The whole-school plan should include developmental approaches for the teaching of the key skills and specific terminology of the Science curriculum.
DETAILED FINDINGS AND RECOMMENDATIONS

1. THE QUALITY OF PUPILS’ LEARNING
The quality of pupils’ learning in Science is good. The pupils are eager and motivated in their attitudes to Science. Pupils demonstrate a good understanding of how to work scientifically and the skills of predicting, observing, experimenting, investigating and recording are well developed. During the evaluation, pupils demonstrated successful learning in the strands of Forces, Materials and Magnets and Electricity. Pupils enjoy opportunities to engage in designing and making activities. There should be a greater focus on the development of oral language skills across the whole school to enable pupils to describe their learning in Science accurately.

In the focus-group interview, pupils demonstrated a very high level of enthusiasm for Science and a keen awareness of its significance for their current lives. They indicated that they particularly enjoyed Science when they have opportunities to engage in hands-on activities and participate in experiments. Pupils in the middle classes displayed a great knowledge of and interest in scientists.

Engagement in co-curricular initiatives such as the Green Schools Programme supports pupils’ environmental awareness and facilitates them in making meaningful connections with life-long learning. Pupils also have the opportunity to engage in the Discover Primary Science and Maths Programme. The internal and external school environment promotes an appreciation of, and engagement in, Science. To further enrich environmental understanding and learning in Science, the school grounds should be further cultivated to facilitate pupils’ exploration of flora and fauna and the investigation of a variety of contrasting habitats.

2. SUPPORTING PUPILS’ LEARNING: LEARNER EXPERIENCES AND TEACHERS’ PRACTICE
The quality of support for pupils’ learning is good. Attractive, stimulating learning environments are provided with useful displays of charts and samples of pupils’ work. The pupils have good access to a range of materials for experimental work in the strands of Forces, Materials and Magnets and Electricity. Pupils in middle classes were able to explore how magnets could push and pull a variety of materials. Pupils in the junior classes were able to identify how objects were moved. At infant level, pupils had a conceptual understanding of the senses. The development of the learning experiences was in evidence in the middle classes where pupils were enabled to construct circuits, and learning experiences were further developed in the senior classes where pupils explored the purpose of conductors and insulators. Pupils are provided with opportunities to engage in a wide variety of field trips and they benefit from talks and demonstrations from visiting speakers. Science is very effectively integrated thematically with other curricular areas, particularly in the infant classroom. Some pupils were given the opportunity to design experiments and to reflect on their learning. Commendably, pupils in all classes are enabled to work as scientists and to research collaboratively. There was a good emphasis on purposeful, collaborative group work throughout the school. Information and communications technology is successfully used to provide images, power point presentations and videos that scaffold, enhance and extend learner experiences.

Teaching in Science is of a high standard. Teachers prepare well-structured, active and challenging lessons. Appropriate teaching methodologies, including investigations and experiments, facilitate purposeful and progressive learning in Science. Where best practice was observed pupils were enabled to participate in pupil-led, open investigations and problem-solving activities. Teachers use a very good range of questions.
The quality of assessment is satisfactory. Teachers use observation, teacher-designed tasks and pupils’ copybooks to record and assess pupils’ knowledge and understanding of the subject. Very good recording of experiments was observed from Science Week in one classroom. Examples of pupils’ work are maintained in some classes. While some strategies are used to assess pupils’ learning in Science there is a need to develop a more consistent whole-school approach to assess pupils’ work and plan for pupils’ future learning in Science. To support continuity and progression, pupils should be enabled to reflect constructively on their own learning and record key facts and skills acquired.

3. THE EFFECTIVENESS OF SCHOOL PLANNING, INCLUDING SSE, IN PROGRESSING PUPILS’ LEARNING

The quality of whole-school planning for Science is satisfactory. The principal works diligently to promote a learning culture in the school. As part of the school improvement process, school staff reviewed the whole-school plan for Science. The revised plan covers all strands and strand units and outlines a cyclical two-year plan to guide teaching in the multi-grade classrooms of the school. It also includes an audit of current resources. The plan could also include developmental approaches for the teaching of key skills, specific terminology of the Science curriculum and famous scientists to be studied. The school is advised to carry out a local environmental audit and identify areas in the locality for pupils to explore and investigate on an incremental basis.

The quality of individual teacher’s planning is good with some aspects in need of development. Where planning is most effective, it includes specific content to be covered, learning objectives, a focus on skills development and reflects the guidelines of the whole-school plan. This good practice in planning should be extended to all classes.
Appendix

School response to the report

Submitted by the Board of Management
Part A: Observations on the content of the inspection report

The Board of Management of Scoil Mhuire Gan Smál, welcomes the findings of the curriculum evaluation report of the inspectorate on the teaching and learning of science in our school. We were particularly pleased with the acknowledgement of the pupils’ high levels of motivation in their attitudes to science and their demonstration of a good understanding of how to work scientifically. We were delighted that the high standard of teaching science was remarked upon and that the facilitation of purposeful and progressive learning in science was recognised.

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

The Board is committed to implementing the report’s recommendations as part of its ongoing school improvement.

- The teaching staff are currently reviewing the whole school science plan to include developmental approaches for the teaching of the key skills and specific language terminology of the science curriculum. The plan will also include an environmental audit and extend the use of the school garden.
- The teaching staff will review assessment practices with the aim of developing and implementing a whole school approach to recording the pupils’ progress in science.
- Individual teachers’ plans will include subject specific vocabulary for science in order to enable pupils to use this language fluently and independently.
**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.

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<thead>
<tr>
<th>Level</th>
<th>Description</th>
<th>Example of descriptive terms</th>
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<tr>
<td>Very Good</td>
<td><strong>Very good</strong> 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 <strong>outstanding</strong> and provides an example for other schools of exceptionally high standards of provision.</td>
<td>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</td>
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<td>Good</td>
<td><strong>Good</strong> 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 very good standard.</td>
<td>Good; good quality; valuable; effective practice; competent; useful; commendable; good standard; some areas for improvement</td>
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<td>Satisfactory</td>
<td><strong>Satisfactory</strong> 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.</td>
<td>Satisfactory; adequate; appropriate provision although some possibilities for improvement exist; acceptable level of quality; improvement needed in some areas</td>
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<td>Fair</td>
<td><strong>Fair</strong> 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.</td>
<td>Fair; evident weaknesses that are impacting on pupils’ learning; less than satisfactory; experiencing difficulty; must improve in specified areas; action required to improve</td>
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<td>Weak</td>
<td><strong>Weak</strong> 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.</td>
<td>Weak; unsatisfactory; insufficient; ineffective; poor; requiring significant change, development or improvement; experiencing significant difficulties;</td>
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