An Roinn Oideachais agus Scileanna
Department of Education and Skills

Curriculum Evaluation
Science

REPORT

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<thead>
<tr>
<th>Ainm na scoile / School name</th>
<th>Brierfield National School</th>
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<tr>
<td>Seoladh na scoile / School address</td>
<td>Tuam</td>
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<td></td>
<td>County Galway</td>
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<td>Uimhir rolla / Roll number</td>
<td>14294W</td>
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Date of inspection: 29-05-2019
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 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.

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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<tr>
<th>Date of inspection</th>
<th>29-05-2019</th>
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<tr>
<td><strong>Inspection activities undertaken</strong></td>
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<td>• Discussion with principal and teachers</td>
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<td>• Review of relevant documents</td>
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<td>• Pupil focus-group interview</td>
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<td>• Observation of teaching and learning</td>
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<td>• Examination of pupils’ work</td>
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<td>• Interaction with pupils</td>
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<td>• Feedback to principal</td>
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**SCHOOL CONTEXT**

Brierfield National School is a co-educational primary school situated seven kilometres from Moylegough in north-east Galway. It operates under the patronage of the Catholic Archbishop of Tuam. Currently, there are four mainstream classroom teachers and three school-based special education teachers (SETs), one of whom is shared with another school in the area. There is a special class for pupils with autistic spectrum disorders (ASDs). At the time of the evaluation, there were eighty-nine pupils enrolled.

**SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:**

**FINDINGS**

- The overall quality of pupils’ learning in Science is good, with scope for the further development of pupils’ skills in specific strands.
- Pupils’ learner experiences in Science are commendable.
- The teaching of Science is good overall, with some examples of very good teaching observed during the evaluation.
- Assessment practices are adequate overall; there are opportunities to further develop practices for whole-school monitoring of pupils’ progression from class to class.
- School planning for Science is satisfactory overall; the whole-school plan is not sufficiently specific to the school context.
- The school has developed a practice of participating in a variety of Science programmes and fairs and does so very successfully.

**RECOMMENDATIONS**

- Greater emphasis should be placed on integrating designing and making skills into each of the curricular strands.
- A whole-school approach to the recording of pupils’ learning should be agreed and implemented at all class levels.
- The whole-school plan should be revised to include a cyclical two-year plan covering all strands of the science curriculum and to identify areas of the locality to explore and investigate.

**DETAILED FINDINGS AND RECOMMENDATIONS**

1. **THE QUALITY OF PUPILS’ LEARNING**

   The overall quality of pupils’ learning in Science is good. Pupils enjoy their lessons in all classrooms and are motivated to learn through active and collaborative methodologies. Their knowledge in the strands of Living Things, and Environmental Awareness and Care is particularly strong. Science is integrated effectively with other curricular areas, particularly in the infant
classrooms where the use of Aistear: The Early Childhood Curriculum Framework promotes the development of the content and skills of the science curriculum. While some opportunities have been provided to engage in making and testing models, there is scope to develop this work further. To this end, pupils at all levels should be provided with opportunities to apply their scientific skills through design and make activities under each strand of the curriculum. Pupils demonstrate good ability to use scientific language. Their work is displayed effectively and celebrated. Responding to the focus group discussion, pupils in the senior classroom spoke very positively about their experiences of learning Science, particularly in regard to the variety of experiments and investigations undertaken.

2. SUPPORTING PUPILS’ LEARNING: LEARNER EXPERIENCES AND TEACHERS’ PRACTICE

Overall, the quality of learner experiences in Science is commendable. Teachers use a range of active and collaborative approaches to encourage discovery learning. Opportunities are provided to observe plant growth through the growing of seeds and bulbs in classrooms. Pupils engage in a variety of project work, field trips and nature walks to explore living things in the environment. They participate actively with Science Week each year and benefit from talks by visiting speakers. Over many years, the school participated in the Green Schools Programme and Discover Primary Science and Maths Programme. In addition, the school competed very successfully in the RDS Primary Science Fair Limerick, 2017. The school’s Digital Learning Plan outlines the proposed use of digital learning technologies (DLT) as a learning resource in progressing research skills pertinent to scientific topics and concepts.

Overall, the teaching of Science is good, with some examples of very good teaching observed during the evaluation. Classroom planning is of a high standard. All teachers prepare well-structured, active and challenging lessons. Appropriate teaching methodologies, including investigations, experiments and collaborative group work, are effectively employed. Science lessons focus on eliciting and discussing pupils’ ideas and teachers model subject specific language effectively. Teachers in the special class for pupils with ASDs use a range of ASD-specific teaching approaches effectively to acknowledge the visual modality of autism and to promote structured learning. The multi-sensory approach adopted in the special class is highly praiseworthy.

The quality of assessment in Science is adequate overall. Generally, teachers assess pupils’ learning through teacher observation, teacher questioning and teacher-designed tasks. They maintain some samples of pupils’ work in a variety of strands, although there is some variation in how these records are maintained. Senior pupils are enabled to reflect on their learning and to record key facts and skills acquired; this good practice should be extended across the school. To support the systematic recording of pupil attainment and progress in Science, a consistent approach to the use of learning logs or curriculum portfolios is recommended.

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

The quality of the whole-school plan for Science is satisfactory. The school has identified a list of resources and equipment to support teaching and learning in the subject. Some classes do not use textbooks for Science thereby giving the teachers opportunity to adapt the curriculum successfully to the learners’ needs and interests.
The current plan for Science requires review so as to better support a developmental whole-school approach to teaching and learning. The plan should provide greater guidance to individual teachers in the delivery of broad strand coverage to the pupils. It should include a cyclical two-year plan covering all strands and strand units of the science curriculum, and outline opportunities to engage in designing and making across all strands of the curriculum. It is recommended also that the school conduct a local environmental audit that identifies areas of the locality for pupils to explore.
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 Brierfield National School are pleased to accept the inspector’s report and its findings.

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 welcomes the inspector’s recommendations and the school will take steps to address these recommendations in the coming academic year.

Work has already begun on a review of our whole-school Science plan. This will include a cyclical two year plan covering all strands of the Science curriculum as well as a whole-school approach to recording of pupils’ learning in Science while highlighting opportunities for designing and making skills. We will also conduct a local environmental audit to identify local areas for pupils to explore. These steps will further enhance teaching and learning in our school.
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.

<table>
<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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