An Roinn Oideachais agus Scileanna
Department of Education and Skills

Curriculum Evaluation
Science

REPORT

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<th>Ainm na scoile / School name</th>
<th>Scoil Náisiúnta Naomh Ruadhain</th>
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<tr>
<td>Seoladh na scoile / School address</td>
<td>Redwood Lorrha Nenagh County Tipperary</td>
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<tr>
<td>Uimhir rolla / Roll number</td>
<td>17244W</td>
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Date of inspection: 16-01-2018
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 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.
SCHOOL CONTEXT
Scoil Náisiúnta Naomh Ruadhain is a rural, co-educational school. It operates under the patronage of the Catholic Diocese of Killaloe. The school has two mainstream teachers including a teaching principal. The school does not have a special education teaching (SET) post based in the school; however, it shares two SETs with other local schools. Enrolment trends are increasing in recent years and, at the time of the evaluation, there were twenty-seven pupils enrolled.

SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:
FINDINGS
• The overall quality of pupils’ learning in Science is very good.
• Pupils engage in a wide range of very high-quality learning experiences in Science.
• The teaching of Science is very good; it is highly commendable that teachers have engaged collaboratively in continuing professional development (CPD) in the subject.
• Pupils’ learning in Science is assessed appropriately; however, further development of assessment approaches is required at whole-school level.
• Commendably, whole-school planning for Science has been reviewed recently; it provides very effective guidance for teaching and learning in Science in the school.

RECOMMENDATIONS
• Pupils’ learning in Science should be monitored and assessed more effectively at whole-school level across all the strands of the Science curriculum.

DETAILED FINDINGS AND RECOMMENDATIONS
1. THE QUALITY OF PUPILS’ LEARNING
The overall quality of the pupils’ learning in Science is very good. Pupils are confident in discussing and applying their learning across a wide range of concepts and skills. The learning outcomes from the lessons evaluated were of a very high quality.

Pupils learning in Science is being developed progressively at a high-quality level in all settings. In interactions with the inspector, pupils could demonstrate their knowledge effectively across a very broad range of curricular strands in the subject.

Pupils can apply their learning in Science at a cross-curricular level very successfully. The majority of pupils are confident in their use of the specific vocabulary of the subject. In the junior classroom, it is highly commendable that Aistear: the Early Childhood Curriculum Framework has...
been devised thematically to facilitate this specific vocabulary development through the medium of play.

Notably, pupils demonstrated a very good understanding of how to care for the local environment. Engagement in co-curricular initiatives such as the Green Schools Programme is facilitating pupils in linking their school-based learning with learning at a national and international level. In the senior classes, pupils could internalise this learning very effectively to support them in their understanding of their role as national and global citizens.

Pupils displayed a very good understanding of working scientifically. In the pupil-focus group interview, pupils stated that their enjoyment of the subject resulted from being enabled to work as scientists on a regular basis. Evidence provided during classroom observations, in pupils’ project work and copybooks indicated that pupils are very confident in the use of scientific skills such as prediction, estimation, measuring, investigation, and experimentation.

Pupils record their learning in Science appropriately in copybooks. In a small number of settings, pupils’ learning in the subject is also displayed at classroom level, through photography and in project work. This highly effective practice should be implemented at whole-school level.

Commendably, pupils share their learning in Science with other classes and with the wider community through class blogs and engagement in initiatives such as the Discover Primary Science project. This project has supported senior-class pupils in making cross-curricular connections across scientific, technological, engineering and mathematical concepts.

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

Overall, pupils’ learner experiences in Science are of a very high quality. In the focus-group interview, pupils stated they enjoy their learning as it provides solutions to their questions about life and how things work. In all settings, pupils were observed to be highly motivated in relation to their learning in the subject.

Pupils at all levels engage collaboratively in high-quality and challenging learning activities in Science. These include problem-solving activities, open-ended discovery tasks and experimentation. During the lessons evaluated, pupils were supported in the discussion of their learning at all stages of the scientific process to enrich their knowledge, vocabulary and understanding of the subject. Pupils were confident in using their scientific knowledge and skills to research, design and create scientific models. A variety of these models was in evidence in the classrooms during the evaluation. The effectiveness of these design models are analysed at whole-class level to support pupils in enhancing the design process.

Pupils engage in a range of field trips to facilitate their understanding and care for the wider school environment. To further support this process, an environmental audit should be conducted. It is praiseworthy that the school has developed an outside classroom and a school garden to enhance learning in horticulture. Commendably, parents are provided with opportunities to share their expertise in this area with pupils. Pupils’ learning in Science is further enriched through their engagement with outside professionals in this subject. These experts support pupils in making authentic connections between their learning in the classroom and their learning at a national and global level.
The quality of the teaching observed was very good. Teacher planning and preparation for lessons and for scientific activities were of a very good quality. Teachers use a range of scientific resources to stimulate pupil engagement and to develop understanding in Science. Teachers differentiate learning effectively across class levels to support pupils in engaging in learning progressively and at an appropriate level.

Teachers use a very wide range of teaching approaches to develop pupils’ knowledge and skills in Science and to support all pupils in accessing the curriculum. These include active learning, investigation, collaborative group work, peer-tutoring, talk and discussion, guided discovery and project work. It is highly commendable that the teaching staff has engaged collaboratively as part of a local learning community in CPD in relation to Science.

Learning in Science is assessed appropriately across a range of concepts. Teachers use teacher observation, teacher-designed tasks and pupils’ copybooks to record and assess pupils’ knowledge and understanding of the subject. It is commendable that, in a few settings, pupils’ work in Science is also assessed through the use of photography.

To further develop current assessment practices, a whole-school approach to the assessment of pupils’ learning in Science across all curricular strands should be developed and implemented. Pupils’ written work in Science needs to be monitored more effectively in senior classes.

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

Overall, the quality of school planning is very good. It is praiseworthy that the whole-school plan for Science has been reviewed recently on a collaborative basis by teaching staff. The plan has been devised to provide guidance to teachers across all strands of the curriculum. The plan outlines a spiral approach to teaching and learning which supports teachers in progressing pupils’ learning and skill development across class levels. Commendably, an inventory of school resources is also included in the whole-school plan.

During the review process, school staff identified areas for further development in teaching and learning in the subject. These areas included the improvement of school resources and the requirement for CPD in Science for staff. There was evidence that the implementation of these improvements at whole-school level is impacting positively on teaching and learning in Science in the school.

4. CHILD PROTECTION

During the evaluation, the following checks in relation to the school’s child protection procedures were conducted:

1. The school principal is aware that revised child protection procedures for primary and post-primary schools came into effect on 11 December 2017 and arrangements are in place to begin the process of implementing these procedures.

2. The name of the designated liaison person for child protection matters was prominently displayed near the main door of the school.
3. The school has a child protection policy in place.
4. All teachers are aware that they are mandated persons and of their responsibilities in that regard.

The school met the requirements in relation to each of the checks above.
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 Naomh Ruadhain welcomes the affirmations and recommendations as made in this report. We acknowledge the excellent work being carried out by the principal and staff.

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

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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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<tr>
<th>Level</th>
<th>Description</th>
<th>Example of descriptive terms</th>
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<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 outstanding 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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