Curriculum Evaluation

Science

REPORT

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<th>Ainm na scoile / School name</th>
<th>Odhram Naofa N S</th>
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<tr>
<td>Seoladh na scoile / School address</td>
<td>Sonna, Slanemore, Mullingar</td>
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<tr>
<td>Uimhir rolla / Roll number</td>
<td>17932U</td>
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Date of inspection: 19-02-2019
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 was given an opportunity to comment in writing on the findings and recommendations of the report; a response was not received from the board.

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

Date of inspection  19-02-2019

Inspection activities undertaken

- Discussion with principal and teachers
- Review of relevant documents
- Pupil focus-group interview

- Observation of teaching and learning
- Examination of pupils’ work
- Interaction with pupils
- Feedback to principal and teachers

SCHOOL CONTEXT
Odhrán Naofa National School is a rural co-educational primary school located near Sonna, County Westmeath. The school operates under the patronage of the Catholic Bishop of Meath. There are four mainstream classrooms in the school and it also has the services of two special education teachers (SET). At the time of the evaluation there were eighty-eight pupils enrolled in the school.

SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:

FINDINGS

- Learning outcomes for pupils in Science are very good overall; pupils do not experience sufficient opportunities to engage in open-ended designing and making activities
- Pupils’ learning experiences in Science are very good and pupils enjoy their lessons and investigations.
- The quality of Science teaching is good, overall, with some very good practice observed; there is further scope for more consistent assessment and tracking of progress in some settings.
- Resources are used very effectively to support teaching and learning in Science.
- The quality of whole-school planning for Science is effective.

RECOMMENDATIONS

- All teachers should ensure that open-ended designing and making opportunities are provided for pupils to enable them to apply their scientific skills independently.
- Teachers should develop and implement a whole-school approach to assessment and tracking of pupils’ attainment of curriculum objectives and skills in Science.

DETAILED FINDINGS AND RECOMMENDATIONS

1. THE QUALITY OF PUPILS’ LEARNING

Overall, pupils’ learning in Science is very good. In the lessons observed, pupils engaged very positively with their learning tasks and they demonstrated a good understanding of scientific concepts. Many pupils explain and justify their work by referring to scientific methods, skills and fair testing procedures. Responding during the pupil focus group interviews, all pupils present spoke of their enjoyment of Science and their experiences of active learning across the curriculum strands. Pupils’ knowledge of scientific concepts and their development of scientific skills are progressing well as the move from class to class in accordance with the curriculum. Most pupils can use scientific vocabulary very appropriately and many can explain their experimental work with good age-appropriate scientific logic. To further promote higher-order thinking skills and independent application of scientific concepts and skills, pupils require additional opportunities for open-ended designing and making tasks. These tasks should incorporate independent or group planning, designing, assembly, testing and review.
2. SUPPORTING PUPILS’ LEARNING: LEARNER EXPERIENCES AND TEACHERS’ PRACTICE

Pupils’ learning in Science is supported effectively in all classes throughout the school. Teachers use a wide range of useful resources to create positive learning environments and to engage pupils in meaningful and active-learning tasks. Classroom displays and projects include good evidence of pupils’ work in Living Things, Energy and Forces, Materials and Environmental Awareness and Care. Pupils often work collaboratively to investigate scientific problems and they are provided with opportunities to discuss their new learning. The school participates in projects such as the Green Flag and From Farm to Fork to involve the local community and to share pupils’ learning in Science with a wider audience. Pupils are provided with opportunities to explore the local environment through nature walks and their use of the school garden.

Overall the teaching of Science is good, with some examples of very good teaching observed. Teachers use subject-specific language well and meaningfully integrate scientific content with other subjects. Pupils with special educational needs (SEN) are meaningfully included in science lessons and they enjoy experiencing success. All teachers demonstrate very good subject knowledge and they manage their classrooms very effectively. They plan a broad range of learning experiences for the pupils across the range of strands. In some cases, further attention to the electricity strand unit of the Energy and Forces strand is required to ensure progression of pupils’ learning. Pupils’ work in Science is monitored effectively and recorded in copies, project work and in observation notes in some settings. However, there is no whole-school approach to assessing pupils’ progress in Science. To further promote balance and continuity in pupils’ learning, it is recommended that the pupils’ mastery of concepts and development of skills be assessed and tracked throughout the school and shared collaboratively among teachers.

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

The quality of whole-school planning for Science is good overall. The whole-school plan provides appropriate guidance for classroom planning and whole-school approaches to Science. The plan emphasises the scientific skills to be developed together with the content objectives to be addressed across all strands of the curriculum for each class level. To further contextualise the whole-school plan to the school setting, it is recommended that teachers collaboratively identify the resources and the local amenities available for exploration in Science lessons and that a two-year cycle for the implementation of all strands and strand units be devised.
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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<th>Level</th>
<th>Description</th>
<th>Example of descriptive terms</th>
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<td>Very Good</td>
<td>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.</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>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 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>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.</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>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.</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>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.</td>
<td>Weak; unsatisfactory; insufficient; ineffective; poor; requiring significant change, development or improvement; experiencing significant difficulties;</td>
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