An Roinn Oideachais agus Scileanna

Department of Education and Skills

Curriculum Evaluation

Science

REPORT

Ainm na scoile / School name	Scoil Náisiúnta Baile an Átha
Seoladh na scoile / School address	Ballina Killaloe County Clare
Uimhir rolla / Roll number	18207V

Date of inspection: 19-09-2018

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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 inspectors 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

Date of inspection	19-09-2018
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

Scoil Náisiúnta Baile an Átha is a co-educational primary school located in Ballina, Killaloe, County Clare. The school operates under the patronage of the Catholic Archdiocese of Cashel and Emly. The school caters for pupils from junior infants to sixth class and has recently established a class for pupils with autistic spectrum disorders (ASD). At the time of the evaluation, there were 429 pupils enrolled. Staffing includes an administrative principal, sixteen mainstream class teachers and six special education teachers (SETs). One of the SETs is shared with another local school.

SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:

FINDINGS

- Overall, the quality of pupils' learning in Science is good.
- Pupils' ability to discuss and report confidently on their learning in Science is limited.
- Pupils' learning experiences in Science are of a high quality; pupils engage in a commendable range of co-curricular activities in the subject.
- The quality of the teaching of Science is good, overall.
- The assessment of pupils' learning in Science is at a satisfactory level; whole-school approaches to assessment are not being implemented consistently.
- The quality of school planning in Science is very good.

RECOMMENDATIONS

- Pupils' ability to discuss and present their learning in Science should be improved.
- Whole-school approaches to the assessment of pupils' learning in Science should be reviewed, and implemented consistently.

DETAILED FINDINGS AND RECOMMENDATIONS

1. THE QUALITY OF PUPILS' LEARNING

Overall, the quality of pupils' learning in Science is good. In almost all of the lessons observed, pupils demonstrated enjoyment of their learning and were well motivated to learn. The learning outcomes from most of lessons observed were of a high quality.

In senior classes, the majority of pupils exhibited a confidence in their use of higher-order questioning to enhance their scientific understanding; this is highly commendable. *Aistear*: *the Early Childhood Curriculum Framework* is used effectively in infant classes to support the development of pupils' scientific understanding through the medium of play.

In their interactions with the inspectors, pupils demonstrated an appropriate knowledge and understanding of scientific concepts and themes. These included understanding of care for the global environment, nutrition, energy and forces, and the properties and characteristics of materials.

However, the ability of the majority of pupils to discuss and report confidently on their learning across the strands of the Science curriculum was limited. Pupils in middle and senior classes demonstrated limited understanding of the concept of a fair test during scientific investigations; developing this concept should receive more attention. Pupils' scientific knowledge of their local environment was satisfactory. More emphasis should be placed on the local environment in science lessons from now on.

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

The quality of support for pupils' learning in Science is good, overall. Pupils' learner experiences are of a high quality. Very positive interactions between pupils and teachers were evident during the evaluation. In the focus-group meeting with the inspectors, pupils reported that they enjoyed working collaboratively with their peers during scientific investigations.

Pupils' learning in Science is celebrated at whole-school level using a variety of media, including photographs, project work and high-quality art displays. The pupils' learner experiences in Science are further enhanced through their engagement with a range of co-curricular initiatives, including Discover Primary Science and Maths, Green Schools, Tidy Towns, and through visits to science fairs. The engagement of middle classes with the Science, Technology, Engineering, Art and Maths (STEAM) programme is also commendable. As the STEAM programme is extended across the school, a stronger focus should be placed on linking investigative activities to scientific concepts.

The quality of the teaching in Science is good, overall. In the lessons observed, the quality of teachers' practice ranged from satisfactory to highly effective. Teachers' planning and preparation for lessons were of a high quality, overall. Most teachers designed purposeful and challenging learning activities for their pupils.

Where highly effective practice was evident, teachers facilitated purposeful and progressive learning, and developed scientific concepts and skills effectively. Pupils' learning was differentiated to provide an appropriate challenge for all. Teachers facilitated the free exploration of materials by pupils and used high-quality questioning to enhance the development of pupils' scientific language and procedural understanding. However, in a significant minority of the lessons, the investigative process was overly teacher-directed. In these cases, the link to scientific concepts was not developed appropriately.

Overall, the quality of assessment practices in Science is satisfactory. Teachers use an appropriate range of strategies to evaluate and improve pupils' learning in Science. These strategies include teacher observation and teacher-designed tasks. There was evidence of the use of a greater variety of assessment tools at some class levels, including concept maps, photographic evidence and learning logs. It is recommended that agreed whole-school strategies for assessment be implemented consistently throughout the school, and embedded in classroom practice.

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

The effectiveness of school planning in progressing pupils' learning is very good. Commendably, the whole-school plan for Science was reviewed recently on a collaborative basis, involving staff and parents. This plan provides clear guidance to class teachers in relation to the teaching and assessment of the skills and concepts of Science at all class levels. It is notable that teachers have also worked collaboratively in relation to planning for Science at each class level. This ensures breadth and balance across curricular strands.

An audit of scientific resources is conducted annually. These resources are managed effectively. School leaders promote a culture of innovation and creativity in Science and the board of management provides support to teachers in their continuing professional development. To build on these highly effective practices, the school plan should include an environmental audit and an outline of the scientific language and investigations to be explored at each class level. A list of famous scientists for study at senior class level should also be compiled.

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 Ballina Primary School is very pleased with the content of the report. The acknowledgement in the report that '*pupils' learning experiences in Science are of a high quality*' represents, in the view of the Board of Management, a most welcome and accurate assessment of how pupils engage with the Science Curriculum in Ballina Primary School. The statement is also, in the view of the Board, a fitting affirmation of their teachers' hard work, dedication and professionalism. The Board of Management welcomes the report's reference to and commendation of the culture of collaborative practice among teachers in the school, as well as to the Board's commitment to supporting teachers' continuous professional development and learning.

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 of Management welcomes the findings of this inspection report. The Board is committed to implementing the report's recommendations as part of its ongoing strategic planning for improvement.

The teaching staff are currently undertaking a review of the School's Assessment Policy. 'Whole-school Assessment Strategies' are being identified and trialled with a view to implementing the most suitable of these consistently across the school, once the review is completed. It is planned to have the review completed by January 2019.

It is also planned to provide more opportunities for the pupils to discuss and show-case their learning in Science. An environmental audit and a glossary of scientific language will be included in the whole school plan, as recommended. A list of famous scientists for study at senior classes is also being complied.

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 *very good* 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;