

**An Roinn Oideachais agus Scileanna**  
**Department of Education and Skills**

**Curriculum Evaluation**  
**Science**

**REPORT**

<b>Ainm na scoile / School name</b>	Shandrum National School
<b>Seoladh na scoile / School address</b>	Newtownshandrum Charleville Co. Cork
<b>Uimhir rolla / Roll number</b>	11496T

**Date of inspection: 03-12-2019**



---

**An Roinn Oideachais  
agus Scileanna**  
Department of  
Education and Skills

## **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

<b>Date of inspection</b>	03-12-2019
<b>Inspection activities undertaken</b> <ul style="list-style-type: none"><li>• Discussion with principal and teachers</li><li>• Review of relevant documents</li><li>• Pupil focus-group interview</li></ul>	<ul style="list-style-type: none"><li>• Observation of teaching and learning</li><li>• Examination of pupils' work</li><li>• Interaction with pupils</li><li>• Feedback to principal and teachers</li></ul>

### SCHOOL CONTEXT

Shandrum NS is a co-educational, rural school under the patronage of the Catholic Bishop of Cloyne. It has a teaching principal along with five mainstream class teachers, two fulltime special education teachers (SETs), and a shared SET who provides five hours support each week. There are 143 pupils enrolled in the school.

### SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:

#### FINDINGS

- The quality of pupils' learning in Science is very good; there is strong evidence of development in learning as pupils progress through the school.
- The school provides very high quality learning experiences for pupils; their creativity is channelled to design and make models that provide both solutions to practical problems and foster their curiosity as to how things work.
- The quality of teaching in Science is very good and collective practice in relation to methodologies, broad curriculum coverage and the fostering of positive attitudes towards Science is excellent.
- The overall quality of assessment in Science is good; there is scope to further enhance assessment for learning.
- The quality of school planning, including school self-evaluation (SSE), in progressing pupils' learning is excellent.

#### RECOMMENDATIONS

- In order to build on good practice in relation to assessment, the school should provide pupils with more targeted feedback on their achievement to enable them to become more active agents in their scientific learning.

## DETAILED FINDINGS AND RECOMMENDATIONS

### 1. THE QUALITY OF PUPILS' LEARNING

The quality of pupils' learning in Science is very good. Pupils demonstrate very high levels of enjoyment and motivation, display a curiosity about local and wider environments and recognise the unique value of Science in their lives. They willingly share their existing ideas and understanding. Pupils in all classes, including infant classes, demonstrate a very good understanding of scientific concepts including variables and the concept of fair testing. In lessons observed, meaningful learning took place which involved pupils modifying existing ideas in the light of new insights gained from scientific investigations. They described the purpose of a range of tasks using specific scientific language.

Pupils in infant and junior classes were observed to change conceptions regarding impact of weight on gravity in a carefully structured lesson on forces. Senior pupils challenged their existing ideas on electrical conductors and insulators in very well constructed activities. There is strong evidence of development in learning as pupils progress through the school. Scientific skills of questioning, analysing, recording and communicating are very well advanced. Through frequent work in investigations, the pupils are developing informed, critical and scientific perspectives that acknowledge the importance of judgements based on facts, accuracy and reason.

Pupils' creative scientific skills are nurtured through consistent participation in Science, Technology, Engineering and Maths (STEM) projects, where they collaborate to design and build suspension bridges, waterproof tents and birds' nests, based on specific required criteria. Their creativity is channelled to design and make models to provide both solutions to practical problems and to foster their curiosity as to how things work.

Analysis undertaken by teachers of attainment in Science indicates that the pupils are achieving to a very good standard in relation to their learning. Significant improvement has been achieved in overall learning outcomes since initial testing.

The pupils who participated in the focus group interview as part of the evaluation demonstrated a deep awareness of the content of their curriculum. They described the strands of the curriculum, their work in investigations in these strands, the benefit they saw in attending scientific workshops and their learning from interviewing scientific experts who visit their school. These pupils were fully aware that Science was the focus of the school's work on school self-evaluation (SSE).

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

The school provides very high quality learning experiences which enable pupils to work as scientists. It uses *Aistear; the Early Childhood Curriculum Framework* to successfully provide infant and junior pupils with frequent opportunities to work as scientists. Records of their work include finger print analysis, design of a waterslide for toy figures and investigations on absorbency and waterproof materials. Each class participates in at least one science-based field trip annually and pupils benefit from attendance at workshops and from visits by scientists across a range of disciplines. Pupils participate in activities that enhance the local environment through their work in the Green Schools Programme and through their collaboration with the local Tidy Towns Committee. The school

celebrates Science Week on an annual basis and this event provides pupils with an opportunity to showcase their work, to share their ideas and to talk about their achievement in Science.

The quality of teaching in Science is very good. Teachers demonstrate exemplary practice in planning and preparation for lessons. Stimulating and well-resourced learning environments provide for the development of pupils' scientific skills. Through carefully structured lessons, teachers facilitate purposeful and progressive learning in all strands and promote Science as an enjoyable and challenging learning experience. Pupils' ideas and theories are expertly used as a starting point for scientific enquiries. Teachers design lessons using a range of teaching approaches, including use of guided discovery, use of the outdoors, projects and collaborative learning. All teachers ensure that lessons are not overly prescriptive and a framework of enquiry is used to shape classroom investigations. Teachers respond appropriately to individual learning needs and successfully scaffold and differentiate learning to support and challenge pupils. The quality of teachers' collective practice in relation to teaching and learning in Science is excellent.

The overall quality of assessment in Science is good and in some classroom settings, assessment of learning is at a very high standard. A broad range of assessment tools is used to determine the quality of pupils' learning outcomes. These include the use of checklists, concept maps, analysis of their representation of data and findings in science copies and written tests and assignments. In order to further extend the good practice observed in assessment, it is recommended that assessment for learning strategies be prioritised. The pupils require more feedback as to the quality of their learning, the development and application of their scientific skills and their capacity to plan, design and make. This will provide pupils with a greater level of ownership of their learning and enable them to identify their individual strengths and aspects of their learning that require further development.

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

The quality of school planning, including SSE in progressing pupils' learning is excellent. The school selected teaching and learning in Science as its focus for SSE in March 2018. It implemented the SSE process in a most thorough manner and analysis of information gleaned through pupil, teacher and parent surveys was used to direct the focus of the improvement programme. Looking at *Our school; the Quality Framework for Primary Schools* was used in a very effective manner to guide the formulation of the school's improvement plan for Science. Agreed initiatives and teaching methodologies are implemented consistently. A detailed plan informs systematic progression in learning outcomes across the breath of all strands of the curriculum.

The principal and the science co-ordinator demonstrate very high quality curriculum leadership capacity in promoting and supporting school improvement in Science. They carefully monitored the implementation process and the impact of this work. In analysing the effectiveness of this initiative, there is strong evidence to indicate significantly improved pupil outcomes, pupil attitudes, parental and teacher perspectives on teaching and learning in Science.

## 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
<b>Very Good</b>	<b>Very good</b> 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 <b>outstanding</b> 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
<b>Good</b>	<b>Good</b> 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 <i>very good</i> standard.	Good; good quality; valuable; effective practice; competent; useful; commendable; good standard; some areas for improvement
<b>Satisfactory</b>	<b>Satisfactory</b> 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
<b>Fair</b>	<b>Fair</b> 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
<b>Weak</b>	<b>Weak</b> 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;

# **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 Shandrum National School is very pleased with our School Inspection Report and its very positive findings.

We are particularly happy that it was acknowledged and reported that our pupils recognise the unique value of Science in their lives and that they demonstrate very high levels of enjoyment and motivation in Science. We are also very glad that this report acknowledges the high standard of professionalism, hard work and dedication of our teachers. This affirms for us that the teaching and learning in our school is of a very high standard.

### **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 accepts the recommendations in the report in relation to assessment.

Our School Improvement Plan will be reviewed and Assessment-For-Learning strategies will be prioritised as an area for further development.

The pupils will receive more targeted feedback in relation to their achievements and the quality of their learning.