Curriculum Evaluation
Science

REPORT

| Ainm na scoile / School name | Killaloe Boys National School |
| Seoladh na scoile / School address | Convent Hill |
|  | Killaloe |
|  | County Clare |
| Uimhir rolla / Roll number | 15370R |

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

Inspection activities undertaken

- Discussion with principal
- Review of relevant documents
- Pupil focus-group interview
- Observation of teaching and learning
- Examination of pupils’ work
- Interaction with pupils
- Feedback to principal

SCHOOL CONTEXT
Killaloe Boys National School, located in Killaloe, County Clare, operates under the patronage of the Catholic Bishop of Killaloe and caters for pupils from junior infants to sixth class. The staff comprises a teaching principal, five mainstream class teachers and four special education teachers (SETs), one of whom is shared with Caherdavin Boys National School. The current pupil enrolment is 133.

SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:

FINDINGS

- Overall, the quality of pupils’ learner outcomes in Science is good; pupils would benefit from a stronger emphasis on the development of scientific vocabulary across all strands of the curriculum.
- Pupils’ learner experiences are of a very high quality.
- The observed teaching was good, and teachers’ commitment to building capacity through the sharing of expertise is highly commendable.
- Pupils are supported effectively in reflecting on their learning in Science; there is scope for more effective monitoring of progression in pupils’ understanding of scientific concepts.
- Whole-school planning and leadership for Science are very good.

RECOMMENDATIONS

- The school should take steps to improve pupils’ use of scientific language across all strands of the curriculum.
- Whole-school approaches to the assessment of pupils’ scientific learning should be agreed and implemented.

DETAILED FINDINGS AND RECOMMENDATIONS

1. THE QUALITY OF PUPILS’ LEARNING

The overall quality of pupils’ learning in Science is good. During the evaluation, pupils were observed to be enjoying their learning and were motivated to learn. The learner outcomes from lessons were of a good standard, overall.

Most pupils could apply their skills and understanding effectively across scientific concepts. In some classrooms, pupils demonstrated very high levels of confidence in presenting their project work. However, pupils’ ability to use appropriate scientific vocabulary was limited. They would benefit from a stronger emphasis on the development of their scientific vocabulary across all strands of the curriculum.
Commendably, pupils are supported in engaging in open-ended investigations and in using their own ideas as a starting point. Pupils demonstrated a very good understanding of the scientific process and the concept of a fair test in middle and senior classes. The majority of pupils in senior classes were confident in discussing the work of famous scientists and the application of science and technology in the environment.

Overall, pupils’ scientific skills are developed very effectively. In a minority of settings, pupils’ skill development in Designing and making was limited and this requires improvement. In the majority of classrooms, pupils’ work in Science is displayed effectively. The wider school environment is used successfully to celebrate pupils’ learning and achievements in the subject.

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

Overall, learner experiences in Science are of a very high quality. During the lessons observed, pupils engaged actively and collaboratively in their learning with access to good-quality resources. Pupils’ learning in the subject is linked effectively with other curricular areas including the writing genres in literacy.

Pupils in the focus group reported very high levels of enjoyment of their learning. They highlighted their use of information and communications technology (ICT) to record and present their learning. They engage in a wide range of extra-curricular and co-curricular activities, including local and national projects in Science, Technology, Engineering, Arts and Mathematics (STEAM). Local experts share their learning with pupils. The pupils engage regularly in field trips to local sites and trails. A stronger focus should be placed on linking the learner experiences provided on these sites and trails to the achievement of curriculum objectives.

Overall, the teaching in Science was of a good standard, with evidence of highly effective practice in a number of settings. Teachers’ preparation for the lessons was of a very high quality. The structure and pace of the majority of lessons were very good. Teachers positively affirmed pupils and classroom interactions were highly respectful, overall. They employed a wide range of teaching methodologies effectively. Most teachers consolidated prior learning and used effective questioning techniques to stimulate and extend pupils’ thinking. Aistear: the Early Childhood Curriculum Framework is used skilfully to support infant pupils in exploring scientific ideas.

The overall quality of whole-school assessment is good. A very worthwhile emphasis has been placed on supporting pupils in reflecting on their learning in Science. Effective strategies included the use of pupil self-assessment folders and mind-mapping activities. Although some strategies are used to monitor pupils’ progress, whole-school approaches to the assessment of pupils’ learning in Science should be agreed and implemented.

Teachers’ commitment to continuing professional development (CPD) in Science and to the building of teacher capacity through peer modelling is highly commendable.

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

The overall quality of school planning for Science is very good. The school principal demonstrates very high levels of commitment to continuous improvement in teaching and learning in the subject.
The school plan for Science was reviewed collaboratively with all school partners. It provides clear guidance to teachers in relation to the development of content and skills across all strands. It is indicative of good practice that areas for improvement have been identified in the school plan. There was evidence during classroom observations that most of the agreed improvement actions were impacting positively on teaching and learning. To build on this highly effective practice, the subject-specific language of Science should be outlined systematically for each strand unit. The way in which trails and other local resources will be used at each class level should be also be agreed and recorded in the school plan.
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 Killaloe Boys National School welcomes the inspection report and wishes to acknowledge the positive findings of this report and the recommendations within. The Board is particularly pleased that the report affirms the very high quality of learner experiences in Science and the high quality of whole-school planning which provides clear guidance to support progression in Science. We are pleased that teachers’ high quality preparation for lessons and commitment to continuing professional development (CPD) in Science was recognised and affirmed.

The Board is very pleased that pupils were observed to be enjoying their learning, were motivated to learn and that pupils’ scientific skills have been identified as being developed very effectively. The Board is pleased that most pupils could apply their skills and understanding effectively across scientific concepts.

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 acknowledges the inspector’s recommendations to further enhance the teaching and learning of Science in our school. To this end, the following steps will be taken:

1. Teachers will identify the specific scientific language that will be explicitly taught at each class level and will include this language in the Whole School Plan for Science. This will be undertaken during term 2 of 2019-20 school year.
2. School staff will collaborate to include a systematic approach to formative assessment of Science in the Whole School Plan before the end of the 2019/20 school year. This will allow the school to further develop the quality of whole-school assessment which is reported as being good.
## 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><strong>Very Good</strong></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 <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><strong>Good</strong></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 <strong>very good</strong> standard.</td>
<td>Good; good quality; valuable; effective practice; competent; useful; commendable; good standard; some areas for improvement</td>
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<td><strong>Satisfactory</strong></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><strong>Fair</strong></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><strong>Weak</strong></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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