An Roinn Oideachais agus Scileanna

Department of Education and Skills

Subject Inspection in Science & Biology

REPORT

| School name | Leixlip Community School |
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| School address | Celbridge Road Leixlip Co. Kildare |
| Roll number | 91371B |

Date of Inspection: 25-04-2017



WHAT IS A SUBJECT INSPECTION?

Subject Inspections report on the quality of work in individual curriculum areas within a school. 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 & Biology under the following headings:

- 1. Learning, teaching and assessment
- 2. Subject provision and whole-school support
- 3. Planning and preparation

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.

Subject Inspection

INSPECTION ACTIVITIES DURING THIS INSPECTION

| Dates of inspection | 24 – 25 April 2017 |
|--|--|
| Inspection activities undertaken | • Observation of teaching and learning during nine |
| Review of relevant documents | class periods |
| • Discussion with principal and key staff | Examination of students' work |
| Interaction with students | Feedback to principal and relevant staff |

SCHOOL CONTEXT

Leixlip Community School is a co-educational post-primary school catering for an enrolment of 688 students. The school offers the Junior Certificate and Leaving Certificate programmes, the Leaving Certificate Vocational Programme (LCVP), the Leaving Certificate Applied (LCA) programme and an optional Transition Year (TY).

SUMMARY OF MAIN FINDINGS AND RECOMMENDATIONS:

FINDINGS

- The quality of teaching and learning varied from weak to very good.
- Some very good questioning of students was observed.
- The balance between teacher-centred and student-centred phases was good in almost all lessons.
- Practical work was safely and efficiently managed.
- A good degree of collegiality and mutual support is evident amongst the science teachers.

RECOMMENDATIONS

- Lesson objectives should be shared with students in all lessons.
- More written developmental feedback should be provided to students on their written work.
- Subject department members should discuss and agree common standards for content and presentation of students' written work and correct with this in mind
- Evidence-based planning for improvement should now be formalised, targets set and actions for improvement should be documented.

DETAILED FINDINGS AND RECOMMENDATIONS

1. TEACHING, LEARNING AND ASSESSMENT

- Overall, the quality of teaching and learning varied from weak to very good, with examples of good or very good practice evident at some stage in all the lessons observed.
- Lessons were generally well prepared. However, lesson structure was uneven. Lesson objectives were not always shared with students and not all lessons ended with a review in order to consolidate students' learning.
- Some very good questioning was observed, in particular in those lessons where an appropriate mix of lower-order and higher-order questions was used and students were given time to think and compose their answers. The level of challenge to students was best in these lessons.
- In some lessons, the need to distribute questions in a more inclusive manner was evident, and especially to draw out the more reticent students.
- The balance between teacher-centred and student-centred phases was good in almost all lessons and a good variety of active teaching and learning methodologies was used.
- The level and quality of teacher movement throughout the classrooms was varied and, in the better examples, students were well monitored and supported and the level of differentiation was good.
- Practical work was safely and efficiently managed. In the better lessons, a very good plenary session was held in advance to ensure that all students knew what was expected of them. Learning was less than optimal where this did not occur and it is recommended that such plenary sessions are always held in advance of practical work.
- Similarly, a plenary review of the outcomes of practical activities was held in the better lessons, to rationalise results and examine sources of error.
- Homework appropriate to lesson content and designed to reinforce learning was assigned in all lessons observed.
- Students' written work is frequently checked but, in general, there is a need to better support improvement by giving more written developmental feedback to students.
- The subject department members should discuss and agree common standards for content and presentation of students' written work and correct with this in mind.
- The implementation of the school's literacy and numeracy policies should be reviewed in order to ensure that these policies influence classroom practice to the greatest extent possible.
- Students engaged very well in the learning process in almost all lessons; they worked hard and made some very good contributions, demonstrating the quality of their learning.
- Rapport between teachers and students was good and this supported the positive learning environment seen in all classrooms.

2. SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- Subject provision for the sciences is good, as is whole-school support: Science is a core subject in junior cycle, it is part of the TY curriculum and all the science subjects are offered to Leaving Certificate students.
- The time allocation to classes is in keeping with syllabus recommendations, although an additional period for TY would provide opportunities to enhance the programme.
- Information and communications technology (ICT) resources are very good and significant further development in the creation of sharing and networking opportunities are underway.
- The use of the four science laboratories is maximised and the shared storage and preparation area is well organised. However, the colour-coded storage of chemicals should be implemented. In addition, the school's health and safety plan should be reviewed.
- Teachers generously provide support for a range of extra-curricular and co-curricular activities.
- A good system is in place for assessing students and issuing progress reports to their homes.

3. PLANNING AND PREPARATION

- The teaching team co-operate well as a science department and a good degree of collegiality is evident.
- Records of department meetings indicate that issues such as the day-to-day management of the department, ICT developments, and curricular and extra-curricular planning are discussed. It is recommended that additional consideration be given to pedagogical issues to ensure that the new junior cycle specification is delivered as required.
- Curricular planning for junior cycle has been good and includes common schedules for course delivery, facilitating common assessments. It is recommended that this work be extended to senior Biology.
- The TY plan needs to be reviewed as its focus is relatively narrow. Additional variety and balance is needed in the programme which should also be used to a greater extent to promote the sciences.
- It is positive that outcomes in certificate examinations are analysed by the science department and compared with national norms. Evidence-based planning for improvement should now be formalised, targets set and actions for improvement should be documented.

The draft findings and recommendations arising out of this evaluation were discussed with the principal, deputy principal and subject teachers at the conclusion of the evaluation.

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.

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 <i>very good</i> 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 | <i>Fair</i> 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; |

Appendix

SCHOOL RESPONSE TO THE REPORT

Submitted by the Board of Management

Area 1 Observations on the content of the inspection report

The Board of Management and Staff welcome this Subject Inspection Report. The report identifies areas where teaching and learning are strong. The recommendations present the school with a challenge for improvement. The school is fully engaged in School Self Evaluation and School Improvement Planning. In these processes we have identified Active Teaching and Learning Methodologies and Formative Assessment as priorities for development. All the recommendations will be addressed through these processes at a whole school level.