

Subject Inspection: Computer Science and Digital Subjects Report

REPORT

Ainm na scoile/School name Cabinteely Community School

Seoladh na scoile/School address Johnstown Road

Cabinteely Dublin 18

Uimhir rolla/Roll number 91310E

Dáta na cigireachta/ Date of evaluation 25-10-2022

Dáta eisiúna na tuairisce/Date of

issue of report

14/03/2023

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 Computer Science and Digital Subjects under the following headings:

- 1. Teaching, learning 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.

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.

Actions of the school to safeguard children and prevent and tackle bullying

During the inspection visit, the following checks in relation to the school's child protection and anti-bullying procedures were conducted:		
Child Protection	Anti-bullying	
The name of the DLP and the Child Safeguarding Statement are prominently displayed near the main entrance to the school.	The school has developed an anti- bullying policy that meets the requirements of the Anti-Bullying Procedures for Primary and Post-Primary	
2. The Child Safeguarding Statement has been ratified by the board and includes an annual review and a risk assessment.	Schools (2013) and this policy is reviewed annually. 2. The board of management minutes	
3. All teachers visited reported that they have read the Child Safeguarding Statement and that they are aware of their responsibilities as mandated persons.	record that the principal provides a report to the board at least once a term on the overall number of bullying cases reported (by means of the bullying recording template provided in the <i>Procedures</i>) since the previous report to the board.	
	3. The school's anti-bullying policy is published on its website and/or is readily accessible to board of management members, teachers, parents and pupils/students.	

The school met the requirements in relation to each of the checks above.

Subject inspection

Date of inspection	24-10-2022 and 25-10-2022
 Inspection activities undertaken Review of relevant documents Discussion with principal and key staff Interaction with students 	 Observation of teaching and learning during 6 lessons Examination of students' work Feedback to principal and relevant staff

School context

Cabinteely Community School is a co-educational post-primary school in South Dublin with a current enrolment of 549 students. The school participates in Delivering Equality of Opportunity in Schools (DEIS), the action plan of the Department of Education for educational inclusion.

The school provides Junior Cycle (JC), a compulsory Transition Year (TY) programme, Leaving Certificate Established (LCE), Leaving Certificate Vocational programme (LCVP) and Leaving Certificate Applied (LCA).

Summary of main findings and recommendations:

Findings

- The overall quality of teaching and learning in lessons was very good with some areas of improvement noted.
- Students were progressing very well in Computer Science where they produced both high quality student artefacts as well as demonstrated very good levels of knowledge and learning.
- Teacher-student rapport was very positive and affirming with respectful engagements and interactions observed in all lessons.
- Subject provision and whole-school support is of a high quality with a wide range of Digital Subjects being offered at both junior and senior cycle.
- Very good lesson planning and collaborative teamwork by the subject department resulted in well-planned engaging lessons that stimulated the learners.
- The school's digital plan was very successful and contained whole-school-initiatives which were designed to improve teaching and learning.

Recommendations

- Specialist computer science expertise should be developed across the subject department through collaborative team-teaching to further develop teacher knowledge and enrich other digital subject provision.
- There was scope to improve student ownership of learning by encouraging students to think independently when problem solving.

Detailed findings and recommendations

1. Teaching, learning and assessment

- The quality of teaching and learning was very good with some areas of improvement noted. Overall students were very engaged in their learning and worked well both individually and in groups.
- Students were progressing very well in Computer Science. Lessons featured both independent and collaborative tasks and students produced very good computational artefacts. Some additional links to computational thinking methodologies when designing solutions would further enhance and progress learning.
- Students developed an ownership and responsibility for their learning in most lessons. In a few instances when the teacher provided solutions early in the learning process, students became disengaged from active problem solving. Emphasis should be placed on guiding and encouraging students to think independently and foster the key skill of being personally effective so that they take more responsibility for their own learning.
- Teacher explanations were clear and accurate. In one lesson, some exemplary practice
 was noted when key words were described both visually and verbally by relating them to
 real world items. This effective practice helped to improve students' literacy.
- Classroom management was positive and affirming; it was characterised by excellent teacher support and affirmation of students' efforts. This motivated them to learn during tasks through respectful engagements and interactions with their teachers.
- Formative assessment practices were well developed in the subject area. Students were provided with oral feedback in lessons to support and encourage them to improve.
- Some very good practice was observed regarding summative assessment strategies.
 Feedback forms were provided to students containing written feedback by teachers on areas of success and development. Areas requiring improvement were followed up by targeted homework to address the students' shortfalls or gaps.

2. Subject provision and whole school support

- Subject provision for Computer Science and Digital Subjects was commendable with a
 wide range of subjects being offered. At junior cycle, the short course in Coding is
 optional and Digital Media Literacy is compulsory. Computer Science is an optional
 subject in the LC. Introduction to information and communications technology is a
 compulsory subject in the LCA programme. The TY programme offers a core computer
 science taster module for all students in addition to other optional digital modules.
- Whole-school support for the Digital Subjects was very good in terms of curriculum options, timetable allocation and equipment. The four specialist rooms were well resourced which allow students to participate fully in the curriculum specification.
- Currently, six teachers are deployed to Digital subjects and this is very good provision.
- While there was a mix of genders studying Digital Subjects among students, fewer numbers of females are opting for them. While initiatives are in-place to promote girls to code, further opportunities to promote subject uptake for them should be encouraged. For example, TY students could be provided with contributions from female role models from either senior cycle or recent alumni to promote subject, real world experiences which may help to increase uptake among girls.
- Teachers were commended for providing a range of extra-curricular opportunities to students including online chess club, coding club, and digital clinics run by students. These activities complement learning and promote real world interest in Computer Science. The school has recently joined the Professional Development Service for Teachers (PDST) Computer Science Buddy System. This should offer further options for the school to network externally with education institutions, business and industry.
- Support for teachers' engagement with continuing professional development was very good. However, further consolidation of expertise in Computer Science should be advanced by using team-teaching to develop capacity across the whole subject

- department. This would increase teachers' knowledge and enrich other subject provision such as the junior cycle coding short course and the TY computer science modules
- The digital plan has embedded the use of technology across the whole-school through
 the use of the digital learning platform. One example is the recent initiative to streamline
 online learning across the entire school, so that every student experiences the same
 virtual classroom user interface for every subject and teacher. This highly effective
 practice brings familiarity to teaching and learning for students when using online
 lessons on a day-to-day basis.
- The schools' digital plan has provided an appropriate focus for teachers to increase the
 use of digital technologies to enhance teaching and learning across a range of subjects
 in the school. For example, digital devices are being rolled out across the school,
 starting with the current 1st years. Their use may over time lead to increased uptake of
 the Digital Subjects.

3. Planning and preparation

- Subject planning and preparation for the Digital Subjects was very good overall and individual lessons were very well planned. Teachers used a variety of teaching resources that stimulated learning and enhanced the lessons.
- The subject plans were very detailed and comprehensive. They included details of: intended learning outcomes that were aligned to appropriate timelines and connected with associated teaching approaches and assessment strategies. Very good teacher reflective practice was noted where teachers adapted the plan to make improvements.
- Subject planning meetings were scheduled regularly with a focus on relevant teaching, learning and assessment practices to improve learning.
- The schools' digital learning plan supported the broader vision of embedding digital technologies across all subjects. Whole-school digital initiatives were being rolled out using the digital learning platform such as improving summative feedback following school assessments and providing differentiated homework for learners.
- The schools' digital learning plan was well thought out with digital leaders in place
 providing expert knowledge to other teachers. The plan was monitored regularly to
 ensure initiatives were progressing appropriately. School Management and the digital
 team were commended for implementing these.

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

Appendix

SCHOOL RESPONSE TO THE REPORT

Submitted by the Board of Management

Part A Observations on the content of the inspection report

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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 welcomes the findings of the Inspection Report and wishes to acknowledge the two recommendations contained in the report.

The school is fully committed to a co-teaching approach and has undertaken training from the NCSE recently to upskill staff in working together effectively in the co-teaching space.

The Board is aware that there are limited opportunities for teachers of Computer Science and Coding to develop skills and is aware that the teacher of Computer Science has undertaken a course a Masters level to acquire the knowledge to teach the subject and has worked hard to develop capacity in colleagues.

The Board will invest in co-teaching in the area of digital subjects in the coming academic year to support this work.

The Board is also aware that the school is currently in Year 3 of a school wide formative assessment initiative which incorporates student and teacher reflection on their own learning.

The board is confident that this focus on promoting student owners of and responsibility for improving their work will support a further independent thinking and problem solving on the part of our students. The Board fully supports and encourage continued work in this area.

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 <i>outstanding</i> 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	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;