An Roinn Oideachais
Department of Education

Subject Inspection: Computer Science and Digital Subjects
Report

REPORT

Ainm na scoile/School name	Stratford College
Seoladh na scoile/School address	1 Zion Road Rathgar Dublin 6
Uimhir rolla/Roll number	61020A
Dáta na cigireachta/ Date of evaluation	28-11-2022
Dáta eisiúna na tuairisce/Date of issue of report	07/03/2023

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

<table>
<tr><td colspan="2">During the inspection visit, the following checks in relation to the school's child protection and anti-bullying procedures were conducted:</td></tr>
<tr><td>Child Protection</td><td>Anti-bullying</td></tr>
<tr><td>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.</td><td>1. The school has developed an anti-bullying policy that meets the requirements of the Anti-Bullying Procedures for Primary and Post-Primary Schools (2013) and this policy is reviewed annually.
2. The board of management minutes 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 Procedures) 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.</td></tr>
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The school met the requirements in relation to each of the checks above.

Subject inspection

Date of inspection	28-11-2022 and 29-11-2022
Inspection activities undertaken • Review of relevant documents • Discussion with principal and key staff • Interaction with students, including focus groups	• Observation of teaching and learning during three lessons • Examination of students' work • Feedback to principal and relevant staff

School context

Stratford College is a fee-charging, co-educational, voluntary secondary school under the trusteeship of the Dublin Jewish Community with an enrolment of 176 students. The school offers the Junior Cycle (JC) programme, the established Leaving Certificate and a compulsory Transition Year programme (TY).

Summary of main findings and recommendations:

Findings

- The overall quality of teaching and learning in lessons was very good with some exemplary practice noted.
- Computer Science was taught highly effectively and students were competent, confident, reflective and creative users of computing technology.
- Learning was greatly enriched by the inclusion of real-world contexts, significant contributions by students, excellent relationships and the engagement of all learners.
- Subject provision and whole-school support for the Digital Subjects were very good with a bespoke Computer Studies subject provided to all year groups.
- The highly effective planning, reflective and innovative practice supported the provision of rich learning experiences where students enjoyed their learning and were motivated to learn.
- The school's digital plan was commendable and the online learning platform was being used effectively across all subjects to support teaching, learning and assessment.

Recommendations

- To build subject provision at JC, the computer science department should explore if the in-house Computer Studies subject meets the criteria for a bespoke JC short course as set out by the National Council for Curriculum and Assessment (NCCA).
- Teachers should include a comprehensive consolidation of learning at the conclusion of all lessons to enable students to reflect on and assess their progress.

Detailed findings and recommendations

1. Teaching, learning and assessment

- The quality of teaching and learning observed in the Digital Subjects was very good with some exemplary practice noted. Through very skilful teaching and excellent lesson preparation, students of all ability were productively challenged. Throughout the lessons, constant connections with real-life context made computer technology concepts relevant.
- Computer Science was taught highly effectively with learners creating high quality artefacts. In all lessons, students' competence in programming was reinforced by strong design development knowledge. Students were active participants and demonstrated the ability to communicate confidently, technically and reflectively.
- Interactions among students and between students and teachers were very respectful and conducive to wellbeing. This positive environment engaged all learners to work independently and collaboratively in a very purposeful and productive manner.
- The students developed ownership and responsibility for their learning by purposeful engagement in practical Applied Learning Tasks (ALT) in line with the Computer Science specification. The students' use of design processes were well advanced. Group work was greatly enhanced by including role play of various software development team members. This role play imitated the jobs of typical real-life industry teams such as developers or testers and was a highly effective strategy for engaging learners.
- In one sixth-year lesson, exemplary practice was observed where students displayed very good strengths in communicating collaborative learning. The students had completed their group practical ALT and very successfully presented their work online to an external expert. Each group presented project overviews, technical concepts, a live artefact demonstration and reflected candidly on their learning. This highly effective practice enabled all learners, according to their ability, to communicate their understanding competently and take ownership for their work.
- Learning intentions were shared with students at the outset of all lessons. Highly effective learning was noted where opportunities were availed of to discuss the planned learning intentions and when sufficient time was provided by some teachers to students to reflect on what they had learnt. This good practice should be implemented in all lessons to enhance learner outcomes.
- In the focus group, students expressed a genuine enjoyment of Computer Science and they believed it gave them vital preparation for their future. This enjoyment came from the rich variety in learning experiences, ranging from practical coding skills to learning about how computers affect society. Students effectively demonstrated the application of skills they had learnt such as computational thinking to find solutions to real-life problems. This illustrated the value of the subject as a lifelong skill for the world of work.
- Formative assessment practices such as providing students with verbal and written feedback on their work were of a high quality. Furthermore, using the online learning platform, feedback provided students with valuable commentary on assignments and homework, both on their progress combined with suggested improvements. The possibility to include students' own opinions on their progress should be explored as a means to further progress learning.
- The design of summative assessments for Computer Science was of a high standard. In-house examinations combined components of continuous assessment, coding tests, homework, written work, practical work and presentations.

2. Subject provision and whole school support

- Subject provision for Computer Science subject is commendable and there is a strong uptake of the optional subject at senior cycle.
- A high quality, compulsory Computer Studies subject is offered to all year groups. This provides students with a good foundation in digital skills. It combines both a Computer Science taster module with a number of digital media elements. The school should now examine whether this provision already meets the NCCA guidelines for a bespoke JC short course. Consideration could also be given to the inclusion of an award to students on their Junior Cycle Profile of Achievement (JCPA).
- Whole-school support for the Digital Subjects was of a high quality in terms of curriculum options, timetable allocation and equipment. The specialist room was very well equipped and created an inviting, positive and vibrant learning environment. There were many interesting visual and interactive displays linking to contemporary and historical events affecting computers and society. These stimulated student interest and curiosity and helped them connect what they were learning in class to real-life.
- An impressive array of co-curricular and extra-curricular activities was available to students. This included Computer Science Week, SciFest and the BT Young Scientist and Technology Exhibition. In addition, links with third level institutions and software companies promoted further career and subject interests. Students' involvement in these activities supported them to extend their learning and promote interest in Computer Science beyond the classroom. Teachers are highly commended for providing these opportunities to students.
- School management is very supportive of teachers who wish to pursue courses for continuing professional development (CPD). Commendably, an extensive range of CPD opportunities have been availed of by the subject teacher. This includes the acquisition of third level qualifications and participation in subject in-service training provided by the Professional Development Service for Teachers to support the implementation of the new specification.

3. Planning and preparation

- The overall quality of planning and preparation in the school was very good with individual lessons very well planned.
- Careful planning and reflective practice underpinned the detailed and comprehensive subject department plan. This document was very closely aligned to the computer science specification and clearly outlined the learning outcomes linked to timelines, together with associated teaching methodologies and assessment strategies.
- The digital learning plan was thorough and reinforced the whole-school strategy to embed digital technologies into teaching and learning in all subjects. This goal was being met through the effective use of the school's online learning platform for teaching, learning and assessment.

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.

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 is delighted with the excellent standards of teaching and learning of Computer Science set out in this report and commends its Subject Department Staff for its commitment to such high standards.

As a ‘new’ subject specification Leaving Certificate Computer Science has proved to be an enormously rewarding and challenging subject and is a very valuable addition to our Senior Cycle Programme in supporting our range of Leaving Certificate Key Skills.

Part B Follow-up actions planned or undertaken since the completion of the inspection activity to implement the findings and recommendations of the inspection.

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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;