

An Roinn Oideachais agus Scileanna

Department of Education and Skills

**Subject Inspection of Technology
REPORT**

**F.C.J. Secondary School
Bunclody, County Wexford
Roll number: 63550Q**

Date of inspection: 15 October 2012



**A N R O I N N | D E P A R T M E N T O F
O I D E A C H A I S | E D U C A T I O N
A G U S S C I L E A N N A | A N D S K I L L S**

**REPORT
ON
THE QUALITY OF LEARNING AND TEACHING IN TECHNOLOGY**

INFORMATION ON THE INSPECTION

Date of inspection	15 October 2012
Inspection activities undertaken <ul style="list-style-type: none">• Review of relevant documents• Discussion with principal and teachers• Interaction with students	<ul style="list-style-type: none">• Observation of teaching and learning during six class periods• Examination of students' work• Feedback to principal and teachers

MAIN FINDINGS

- A very good level of teaching and learning was evident in the technology lessons observed.
- An excellent blend of innovative and challenging design-based projects has been developed which facilitates the development of students' problem-solving skills.
- The level of student achievement and uptake of higher level in certificate examinations is very good.
- The levels of quality and presentation of students' written work varied considerably.
- School management provides a high level of support for Technology across the curriculum.
- Planning for the delivery of Technology is effective with good systems in place resulting in very good quality subject planning documentation.

MAIN RECOMMENDATIONS

- The subject department should review its practices in relation to the correction and monitoring of students' written work with a view to improving the overall quality and presentation achieved by all technology students.
 - The subject department should ensure that all technology subjects are equally represented in the time allocated to the technologies during the school's TY programme.
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INTRODUCTION

F.C.J. Secondary School offers Technology as an optional subject in its Junior Certificate and Leaving Certificate programmes. A technology module that encompasses some elements of the technology subjects provided in the school is also provided for Transition Year (TY) students. The school has a current enrolment of 771.

TEACHING AND LEARNING

- Teaching and learning in Technology was observed to be very good in all lessons observed during the evaluation.
- Lessons emphasised both practical and theory aspects of the syllabuses and in all instances these components were taught in an integrated manner that allowed students to reinforce their knowledge and understanding through the application of skills.
- Teachers' inputs and demonstrations were short and focused. This provided students with ample time to participate in lesson activities and to practise their design and manufacturing skills.
- The quality of prescribed project work was excellent. The design-based problems enabled students to maximise their innovative capabilities and create artefacts that are educationally and technically robust but also visually appealing.
- During practical demonstrations, teachers were very well prepared and taught key skills to students in a logical and sequential manner. Jigs and fixtures were used in some instances to assist accurate location and forming of materials. Students were actively involved in presentations and their contributions demonstrated a good understanding of the various processes.
- Opportunities to promote design were availed of in the lessons observed. This approach was very successful and helped to promote active learning and problem solving, two key themes of the technology syllabus.
- Where learning outcomes were recapitulated at the end of lessons, additional student participation and interactions would have been desirable. This would have helped to inform teachers of students' understanding and of the areas in need of additional revision and development.
- In some instances, sequential process sheets have been developed to assist students when carrying out practical tasks. This method enables students of all abilities to self-differentiate during lessons. Diagrammatic representations helped students with literacy issues to structure their progress while high-achieving students were given the opportunity to progress at a rate more appropriate to their abilities.
- Students' literacy development has been highlighted as a key priority at whole-school level. One specific strategy is currently being trialled and a concerted effort should be made at subject department level to embed this in practice. The subject department should pursue this strategy in conjunction with a review of its assessment practices, particularly in relation to achieving consistency in the presentation and quality of students' written work.
- Both rooms used for the delivery of Technology are very well equipped and provide students and teachers with appropriate teaching and learning environments. Information and communication (ICT) resources are integrated into the classrooms effectively and

these enabled the teachers to display prepared resources or web-generated media during lessons in a seamless manner.

- Teacher and student rapport was very good and lessons were characterised by independent and autonomous learning facilitated by the teacher.
- Overall student learning was very good. Students' knowledge was clearly evident in the quality of responses and interactions observed during lessons. Students' skill development was good and progressing at a rate appropriate to their age and abilities. While the quality of students' written work varied, a more focused approach to correction and monitoring would have a beneficial effect on the standards attained by students across the subject area.
- Student uptake of higher level is very good, particularly in junior cycle and attainment rates are good at all levels. The subject department should consider a more formalised approach to tracking student achievement. This could be carried out at class level with examination-year students by setting and reviewing goals on an ongoing basis.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- Technology is a longstanding subject in junior cycle and was added to the school's senior cycle curriculum in 2007. The school now offers all four technology-based subjects at both junior and senior cycle. This is a significant commitment to technology education by school management and is commended.
- In light of this commitment, the subject department should maximise the resources available to it by ensuring that a Technology component is taught and learned during the schools' optional TY programme. The resulting module could comprise design, graphics and manufacturing elements, utilising a wide variety of materials and presentation techniques. This initiative would also help TY students to sample aspects of all four senior cycle technology-based subjects on offer in the school.
- Uptake of Technology is very good. This has resulted in the formation of seven distinct class groups at junior cycle and two class groups at senior cycle. The time allocated to these groups is good, particularly in third year, where students receive five class periods per week. All other year groups receive appropriate time and this is usually divided into single and double periods as is common practice.
- Students receive good levels of support prior to making their subject choices. This support is provided mainly during organised information evenings for both parents and students.
- First-year students choose from fixed option bands. Upon entering fifth year, students are given an open choice and choose their preferred options from a list of all available subjects. Option bands are then formed based upon these preferences.
- School management provides the technology subject department with very good support. This support is evident on the school's timetable and in the facilities and planning structures that have been developed.

PLANNING AND PREPARATION

- The structures to support subject planning in F.C.J. Secondary School are effective and enable the co-ordination duties to be shared on a rotational basis. Records of planning meetings are maintained and a very useful template, based upon a SMART model, has been developed to structure the proceedings and actions resulting from planning meetings.
- Curricular content plans have been developed by the subject department. These schemes, framed within desired learning outcomes for students, are followed by all year groups and help to provide a common learning experience for all students.
- Practical and theoretical outcomes are outlined in these plans and are also accompanied by agreed assessment procedures, as is good practice.
- Planning and preparation for individual lessons was very good and suitable resources and teaching aids helped to enhance students' learning experiences.

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

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Appendix

School response to the report

Submitted by the Board of Management

Area 1: Observations on the content of the inspection report

The Board is very pleased with the excellent report and wishes to commend the Technology Department.