

An Roinn Oideachais agus Scileanna
Department of Education and Skills

**Subject Inspection of Technical Graphics and Design
and Communication Graphics
REPORT**

**St Joseph's Secondary School
Drogheda, Co. Louth
Roll number: 63840C**

Date of inspection: 16 March 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 TECHNICAL GRAPHICS AND
DESIGN AND COMMUNICATION GRAPHICS**

INFORMATION ON THE INSPECTION

Date of inspection	16 March 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

- In all lessons observed, teaching and learning was good.
- A good rapport was evident between the students and teachers.
- Students' portfolio work is being monitored frequently.
- Homework is being allocated on a regular basis.
- The display of posters and students' work has created a stimulating learning environment.
- Subject department planning is well progressed and teachers have engaged well in the planning process.

MAIN RECOMMENDATIONS

- As a support for literacy development in the school, new words encountered during lessons should be written on the board and recorded by students.
 - Sketching and the development of freehand drawing techniques should be incorporated into the everyday teaching of the subjects.
 - Available teaching and learning resources should be listed in the schemes of work and linked to student learning outcomes.
 - Transparent procedures around the integration of continuous assessment marks with end of term examinations should be recorded in the planning folder.
-

INTRODUCTION

St Joseph's Secondary School currently caters for 613 male students. Technical Graphics (TG) is offered as an optional subject in the Junior Certificate programme and Design and Communication Graphics (DCG) is offered as an optional subject in the Leaving Certificate programme. Transition Year (TY) is optional in the school and does not contain a graphics module.

TEACHING AND LEARNING

- In some of the lessons visited, the learning outcomes were written on the board at the outset. To improve on this good practice, these should be revisited at the end of the lesson to aid recapitulation and to check for learning.
- Lessons were delivered in a structured manner and were well managed throughout. Good routines ensured that students were quick to get organised.
- Lessons typically featured strong links with prior learning which helped to consolidate students' learning.
- Differentiated questioning was used effectively which kept all students involved in learning. Students were affirmed for correct answers given.
- During lessons, the teachers used and emphasised the terminology associated with the subjects. This good practice supports the development of literacy levels in the school. To increase this support, it is recommended that new words encountered during lessons be written on the board and recorded by students.
- Information and communication technology (ICT) was integrated well into lessons. It was used to present questions as well as to aid the explanation of complex concepts through the use of visual presentations.
- The most frequently observed teaching method in the lessons visited involved the teacher constructing drawings on a drawing sheet with a close-up of this work being displayed using a visualiser. This methodology worked well.
- When the board was used as a teaching aid, it was used effectively. The proper use by the teacher of the drawing instruments as well as the incremental build up of a drawing solution, offered a strong support to students and served to model best drawing practice.
- An acrylic picture plane was used to good effect during a lesson introducing perspective. Several students were invited to use the model and this created a good basis for general classroom discussion. The use of such three-dimensional models is commended as it assists students' visualisation of difficult concepts.
- At present the teaching of freehand sketching is limited to senior cycle. It is recommended that the subject department seek more opportunities to promote sketching and the development of freehand drawing techniques from the beginning of first year. The sketching of possible solutions to exercises as well as pictorial or orthographic projections of objects should be incorporated into the everyday teaching of the subjects.
- Homework, in the form of the completion of class work, worksheets and full drawing problems is assigned on a regular basis. This good practice supports the in-school learning of students.

- Good levels of work were evident in students' portfolios. This work is monitored regularly through the use of marks out of ten and comment marking.
- In all lessons visited, teachers circulated amongst the students to ensure that they were on task and were engaged in lesson activities. Where appropriate, teachers offered individual support and direction.
- A very good teacher-student rapport was evident. Discipline was sensitively maintained throughout lessons. These factors, coupled with obvious teacher enthusiasm, encouraged active engagement by the students.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- At times of transition students are offered an open choice of optional subjects with subject groupings then prepared to best accommodate these choices. Students are well informed at times of choice through the provision of information leaflets, information evenings and advice from subject teachers.
- Time provision for the subjects across almost all class groups is in keeping with recognised good practice. However, one second-year group has only three periods of TG per week. This issue has been resolved by senior management for the next academic year. Lessons are well distributed throughout the week with a good balance between single and double lesson periods.
- It is recommended that, subject to resources, a graphics module be incorporated into the TY programme. As well as providing continuity between junior and senior cycle, such a module would provide students who have no prior experience of TG with an opportunity to experience graphics.
- One subject teacher has recently graduated and is in his first year of teaching. The other subject teacher has availed of subject-specific training provided by the Technology Subjects Support Service (t4) and has attended evening classes on the use of *SolidWorks*. The in-career development of teachers is supported by management and is commended.
- The room available for the teaching and learning of the subjects is well organised, neat and tidy. A stimulating learning environment has been created through the display of posters, some students' work and two full DCG assignments. A range of three-dimensional models are also displayed.
- The subject department should now create a display of subject related work on the corridor walls outside the classroom in order to raise the profile of the subject amongst the whole school cohort.

PLANNING AND PREPARATION

- A subject coordinator is in place and subject planning meetings are held regularly. Minutes of these meetings are retained and provide evidence that the subject department has engaged well with the planning process.
- Separate planning folders exist for TG and DCG. Both follow a similar format and are well developed and organised.

- The schemes of work are detailed and written in terms of student learning outcomes. This work is commended. To further build on this work, it is recommended that teaching resources be listed and linked directly to student learning outcomes. Resources listed should include digital presentations, photographs and *SolidWorks* models.
- A significant proportion of the marks awarded for end-of-term tests are based on students' portfolio work. The criteria used for the allocation of these marks are unclear. To address this, it is recommended that transparent procedures be documented around the integration of continuous assessment marks with end-of-term examinations.
- As is good practice, students' outcomes in the certificate examinations are analysed to inform long-term planning for the subjects.

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; a response was not received from the board.