

An Roinn Oideachais agus Scileanna
Department of Education and Skills

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

Skerries Community College
Skerries, Co. Dublin
Roll number: 76078Q

Date of inspection: 31 January 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	31 January 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 five class periods• Examination of students' work• Feedback to principal and teachers

MAIN FINDINGS

- In all the lessons observed, teaching and learning was of a high standard.
- Students were well supported during lessons through the use of a wide range of resources.
- Teacher-student interactions were engaging, purposeful and mutually respectful.
- The subject department is supported effectively within the school through the provision of time, resources and equipment.
- There were variations found in the monitoring of students' portfolio work and in the provision of written developmental feedback to students on their work.
- Subject planning folders are well organised and the schemes within these plans are well structured.

MAIN RECOMMENDATIONS

- The subject department should agree procedures for the integration of marks awarded to students from continuous assessment of their portfolio work and graphic assignments, with results awarded for end-of-term examinations.
 - As a means of developing the schemes of work, further detail should be provided on teaching and learning resources and on proposed methods of assessment for each unit of study.
 - A written plan needs to be developed for the Transition Year (TY) module.
 - Long-term plans should be put in place to further develop the subjects in the school. Once identified, strategies should be put in place to achieve these goals.
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INTRODUCTION

Skerries Community College currently caters for 930 students: 568 boys and 362 girls. Technical Graphics (TG) is offered as an optional subject in the Junior Certificate (JC) programme and Design and Communication Graphics (DCG) is offered as an optional subject in the Leaving Certificate (LC) programme. The TY programme is optional in the school and contains a compulsory graphics module.

TEACHING AND LEARNING

- The aims of the lesson were clearly communicated to students at the outset. In some cases these were written on the chalkboard, as is best practice.
- In all lessons care was taken to revise previous learning through questioning. This helped to consolidate student learning prior to the introduction of new material.
- Questioning was most effective in lessons where students were encouraged to think for themselves, especially when open-ended questions were used. This was particularly evident in a junior cycle lesson where students were given plenty of time to formulate their answers. Students' contributions were affirmed by the teacher.
- Ruled chalkboard work by teachers was of a high standard with drawings constructed incrementally. Care was taken to ensure that students followed the steps involved. Learning was further supported through the use of quick freehand sketches to illustrate difficult concepts.
- During demonstrations teachers utilised 3-D models, *SolidWorks* models and everyday objects to good effect to promote students' development from concrete experience to abstract representation.
- In one lesson observed on the development of surfaces, everyday cardboard packaging was used to enhance students' understanding of the subject matter.
- Underlying principles were explored during lessons through whole-class discussion. Drawing problems were then introduced based on the application of these concepts. This is good practice.
- Teachers used subject-specific terminology continuously throughout the lessons. As a support for the development of literacy levels in the school, it is recommended that this terminology be written on the chalkboard and recorded by students.
- In several lessons observed, the assessment criteria of examination questions were discussed. Sample marking schemes were also displayed to help students focus on their outputs. This promoted self-assessment among students and allowed them to critically analyse their work. This is a worthwhile strategy especially for examination year groups.
- The portfolios examined contained appropriate levels of material. There were, however, variations on the levels of written feedback provided to students on this work. It is recommended that the subject department develop common policies and practices in relation to the correction and annotation of students' coursework.

- Currently it is not subject department policy to award any marks for student portfolio work. It is recommended that a portion of students' assessment grades that are awarded in Christmas and summer tests be based on students' folders. This practice would motivate students to keep up-to-date portfolios and would also give them credit for their work throughout the year.
- In all lessons observed, individual support and direction was provided to students as they completed their assigned tasks. Good classroom management contributed to a positive atmosphere and the enthusiastic engagement of students.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- Students are well supported when making subject choices for junior and senior cycle. They are given an open choice of optional subjects with subject bands subsequently developed based on students' preferences. This prioritisation of the needs of students is commendable.
- All year groups receive an appropriate time allocation for the subjects, and lesson periods are evenly spread throughout the week.
- The teaching team has availed of subject-specific training provided by the Technology Subjects Support Service (t4). One of the teachers has also presented in-service to the staff on the use of information and communication technology (ICT) in the creation of teaching resources. The in-career development of the teaching team is commended.
- There are two rooms available for the teaching and learning of the subject. One of these is equipped with twenty-four computer workstations and is used for the ICT elements of the DCG syllabus whilst the other is of a more traditional layout. Both rooms are neat, tidy and well organised.
- The display outside the classrooms of a sample of students' work helps to raise the profile of the subjects among the whole school cohort. To further improve on this good work, consideration should be given to the display of a full DCG project at both higher and ordinary level.

PLANNING AND PREPARATION

- The role of subject coordinator is shared, with one teacher responsible for TG and another responsible for DCG. Formal planning meetings are held once per term with minutes of these meetings retained.
- Separate planning folders have been developed for the two subjects. These follow the School Development Planning Initiative template and are very well developed.
- The schemes of work within the planning folders are well laid out and clear. To build on this good work, it is recommended that more detail be provided on teaching resources and proposed methods of assessment for each topic to be covered.
- Individual planning for lessons was very good with teachers having prepared a range of teaching and learning resources including worksheets, 3-D models, ICT presentations and *SolidWorks* presentations.
- There is no written plan for the TY graphics module. It is recommended that a module descriptor be created which provides continuity between TG and DCG. Basic drawing

skills, parametric modelling using SolidWorks and freehand sketching should form the core of the TY work.

- It is recommended that the subject department identify priorities for the future development of the subjects within the school. Priorities should include: increasing student uptake of higher-level DCG and increasing the numbers of students opting to study DCG after completing the JC.
- It is recommended that a long-term planning section be developed within the subject plan. An initial area of focus should include the drop off in student numbers studying the subjects when moving to senior cycle.

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 of the school was given an opportunity to comment on the findings and recommendations of the report; the board chose to accept the report without response.