Subject Inspection of Materials Technology (Wood) and Construction Studies
REPORT

Plunket College
Whitehall, Dublin 9
Roll number: 70310K

Date of inspection: 26 October 2011
REPORT
ON
THE QUALITY OF LEARNING AND TEACHING IN MATERIALS TECHNOLOGY (WOOD) AND CONSTRUCTION STUDIES

INFORMATION ON THE INSPECTION

<table>
<thead>
<tr>
<th>Date of inspection</th>
<th>26 October 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inspection activities undertaken</strong></td>
<td><strong>Observation of teaching and learning during two class periods</strong></td>
</tr>
<tr>
<td>Review of relevant documents</td>
<td>Examination of students’ work</td>
</tr>
<tr>
<td>Discussion with principal and teacher</td>
<td>Feedback to principal and teacher</td>
</tr>
<tr>
<td>Interaction with students</td>
<td></td>
</tr>
</tbody>
</table>

MAIN FINDINGS

- Activities were well planned and organised which ensured that the learning environment was appropriately ordered.
- The teaching and learning in the lessons observed during the inspection was good.
- Several issues relating to health and safety were identified during the inspection.
- The subject department is well supported through the provision of time, resources and equipment.
- The teacher has engaged in extensive continuing professional development (CPD).

MAIN RECOMMENDATIONS

- Improved health and safety procedures need to be put in place. These should include regular safety audits, the marking of safe operational areas (SOAs) and the wearing of personal protection equipment (PPE) when using machines.
- A text-rich environment should be created as a support for the development of literacy levels in the school with new terminology and key words displayed prominently in the classroom.
- Homework should be allocated on a regular basis to all year groups.
- The schemes of work within the subject plans need development. For each topic to be covered, information should be given on student learning outcomes, teaching resources, teaching methodologies and methods of assessment.
INTRODUCTION

Plunket College participates in DEIS (Delivering Equality of Opportunity in Schools), the action plan of the Department of Education and Skills for educational inclusion. It currently caters for 526 students, 317 of whom are in Junior and Senior cycles: 230 male and eighty-seven female students. The remainder of the students are at Post Leaving Certificate or adult/VTOS levels. Materials Technology Wood (MTW) is offered as an optional subject in the Junior Certificate programme and Construction Studies (CS) is offered as an optional subject in the Leaving Certificate programme. The Transition Year (TY) programme is not offered to students in the school.

TEACHING AND LEARNING

- All lessons observed had clear aims and objectives and these were shared orally with the classes. To further build on this good practice, the proposed learning outcomes could be written on the chalkboard and used at the end of the lesson to assist reflection on the progress made.
- Students had an established routine with regard to entering the room and getting set up for their lesson.
- Lessons were logical and sequential and the pacing was appropriate.
- Various forms of questioning were used during lessons. These included global and individual questions. This robust use of questioning helped to improve the overall understanding of topics and helped other students to consolidate learning.
- In one junior-cycle lesson observed, individual students were invited up to the chalkboard to sketch stages in the life cycle of a tree. This strategy impacted positively on student learning and effectively revised the contents of the previous lesson.
- At the time of the inspection there were no information and communication technology (ICT) facilities in the room to assist in teaching and learning. This situation will soon be addressed by school management. This ongoing support of the subject department is commended.
- All classes in MTW and CS are of mixed ability. The work being undertaken by students was appropriate and included differentiated tasks which allowed all students to succeed at a level appropriate to their abilities.
- Demonstrations were well used allowing the teacher to model the proper execution of woodworking processes and associated skills. These were given to the whole-class group initially, with the teacher then demonstrating to small groups or individuals as the need arose.
- A feature of practical lessons was the careful integration of subject theory and terminology. This practice enhanced both teaching and learning and is highly commended.
- A range of safety signs were in evidence in the workshop. These help to reinforce the students’ knowledge and understanding of health and safety practices. It is urged that particular care be taken to ensure that students adhere to these signs and wear PPE when using machinery in the classroom.
• As a support for literacy, new terminology encountered during a lesson should be written on the chalkboard, a flip chart or a poster. These new words could be transcribed by the students into their copybook. The placing of name labels on tool racks and machines and the generation of key-word lists by the teacher would also be helpful.

• At the time of the inspection the classes visited had completed a considerable amount of practical work. As a result of this, there was very little written work in students’ copies. It is suggested that the other areas of the syllabuses, including freehand drawing, written work and the production of scale drawing details be better integrated through the planned sequence of work.

• It was clear that homework is not allocated to students on a regular basis. Homework supports the work students do in school and should be assigned to all year groups. In the case of those classes that find homework challenging there may be opportunity to support these students through the provision of worksheets.

• To reward students for their work throughout the year the subject department needs to develop a clear and transparent system which combines the outcomes of continuous assessment of practical work with marks awarded in written examinations. Students should be kept aware of their continuous assessment marks.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

• All class periods are one hour long. Classes are well distributed across the week. The time allocated to MTW and CS is sufficient for the completion of the respective syllabuses.

• The room available for the teaching and learning of the subjects is well equipped and maintained. Tools and equipment are neatly stored and organised.

• Some students’ practical project work is displayed in the classroom. The subject department should seek additional ways to display students’ work.

• The demarcation of SOAs around machines should be carried out immediately. The rationale for such SOAs and the implications for movement and behaviour in the vicinity of machines should be explained to students.

• The subject teacher has attended in-service training provided by the Technology Subjects Support Service (t4). Recent whole-school professional development events have focussed on differentiation and special educational needs. Management is commended for supporting this in-career development.

PLANNING AND PREPARATION

• Teachers of the technology subjects and Art meet formally, as a group, twice a year. Records of these meetings should be retained in the planning folder.

• Lessons were well planned with the necessary classroom resources prepared in advance.

• The planning documents are well presented and broadly follow the School Development Planning Initiative template. They contain schemes of work outlining topics to be covered by each year group during the course of their studies. To further develop this work details should be provided on learning outcomes, resources, suitable teaching methodologies and proposed methods of assessment for each topic to be studied.
• When planning for MTW, the subject department is encouraged to place a greater emphasis on the development of the students’ understanding of the design process and their ability to produce a project write-up which follows the State Examinations Commission guidelines.

• It is recommended that a regular safety audit of the room be carried out by the subject department. This should identify all significant hazards associated with the woodworking machines and portable electric hand tools. In tandem with this, the control measures put in place to reduce risk should be listed. The safety checklists must be signed, dated and copied to management.

The draft findings and recommendations arising out of this evaluation were discussed with the principal and subject teacher 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.