An Roinn Oideachais agus Scileanna Department of Education and Skills

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

Saint Patrick's Comprehensive School Shannon, County Clare Roll number: 81007U

Date of inspection: 18 October 2011



REPORT

ON

THE QUALITY OF LEARNING AND TEACHING IN CONSTRUCTION STUDIES AND MATERIALS TECHNOLOGY (WOOD)

INFORMATION ON THE INSPECTION

| Date of inspection | 18 October 2011 |
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| Inspection activities undertaken | Observation of teaching and learning during six |
| Review of relevant documents | class periods |
| Discussion with principal and teachers | • Examination of students' work |
| • Interaction with students | Feedback to principal and teachers |

MAIN FINDINGS

- Where students' previous knowledge was reviewed at the outset of lessons this set a context for effective learning.
- The caring pleasant atmosphere in lessons was conducive to learning.
- Some good provision for literacy support was observed.
- Good provision is made in timetabling for the subjects.
- The annual budget supports good planning for resources at subject department level; however, there is scope to further develop the subject plan.

MAIN RECOMMENDATIONS

- All lessons should be carefully planned and structured to provide variety in learning experiences.
- To support learning effectively a broad range of teaching approaches and strategies should be used in all lessons.
- The subject department plan should be further developed, linking specific content of the programmes of work with the most appropriate teaching methods, teaching resources and expected learning outcomes.
- Student assessment, both formative and summative, should be further developed and detailed in the subject plan.

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INTRODUCTION

St Patrick's, Ireland's first comprehensive school, was established in 1966. This co-educational school provides for the broad educational needs of second-level students in Shannon and surrounding areas of County Clare. The curriculum of the school includes a full range of technology subjects. Construction Studies (CS) forms part of the optional Transition Year (TY) and the Leaving Certificate Applied (LCA) curriculum, in addition to being offered in the established Leaving Certificate. The current enrolment is 575.

TEACHING AND LEARNING

- Some instances of good teaching were observed. Some lessons were well structured to suit learners' interests and needs. However, teaching strategies used in other lessons did not engage students effectively or did not provide students with sufficient challenge.
- One lesson began with a review of students' previous knowledge. This effective opening strategy should be further extended to include sharing, or negotiating, the expected learning outcomes with the students. Time should then be provided at the end of the lesson to review the degree to which expectations have been met.
- Students became increasingly restless during one double-period Materials Technology (Wood) (MTW) lesson when the theory of various hand tools was being taught. It is recommended that such content be integrated with carefully structured practical lessons to differentiate the learning experience.
- In a CS lesson students moved directly from initial ideas for coursework design projects
 to providing a cutting list without considering other necessary aspects, such as the
 material to be chosen, the joints to be used or the making of a working drawing. As a
 result students were not presented with sufficient structure or challenge to support
 learning.
- Students should be supported to plan the design and realisation of coursework projects in a structured way and, concurrently, to complete the design portfolio as they proceed. Care should be taken that the students follow the correct sequence.
- The atmosphere in each of the lessons was positive and affirming. Necessary correction was done sensitively. Well practised classroom routines ensured minimum disruption. These factors supported a good learning environment and good relationships.
- Students generally displayed growing knowledge and understanding as observed in their questioning and their responses to teachers' questions. This indicated a measure of learning. However, in some lessons more consistent checking of students' understanding should have been undertaken. Assessment for learning (AfL) strategies should be explored and implemented in all lessons, including comment-based assessment in students' drawings and copybooks.
- Some good literacy support was observed. This should be further developed by adopting strategies such as the compilation and display of keyword lists, ideally with the active involvement of students.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT

- The time allocation for MTW and CS is good and is sufficient to cover the respective syllabuses. Good lesson distribution maintains students' contact with the subjects across the week. At least one double-period lesson each week facilitates practical work.
- The subjects are offered in option bands in each of the curricular programmes in the school. These bands are generated annually based, as is appropriate, on the preferences of the current first-year and fifth-year student cohorts.
- Students are well supported in choosing subjects. First-year students study all subjects for
 the first half-term. Early changes of mind are treated flexibly. The guidance counsellor
 interviews all junior and senior students involved in option choices and information
 nights are provided for parents.
- In-school assessment is well developed. Continuous assessment of practical work and design portfolios is combined with in-house examination marks. However, while assessment procedures specific to MTW and CS are commonly understood by teachers and students of the subjects, they are not formally described. It is recommended that common assessment procedures be agreed by the subject department, recorded and placed in the subject plan. Students should be given regular feedback on their work to encourage and inform further learning.
- The specialist rooms are of high quality comprising two woodwork rooms and two graphics rooms, one of which has computers with the *SolidWorks* computer-aided design software installed. Opportunities should be provided for all students of MTW to be introduced early to *SolidWorks* as part of their design work. The requirements for access to the graphics room should be included in the subject plan and made known to management for consideration when timetabling.
- The acquisition of materials, equipment and consumables is well supported by an annual budget for MTW and CS. This arrangement is a very good support for effective resource planning at subject department level.

PLANNING AND PREPARATION

- There is an established subject department structure with a permanent subject coordinator. It is urged that rotation of the role of co-ordinator, perhaps annually, be considered. Rotation has merit for skills development in the subject department and continuity of leadership in the longer term.
- The subject department meets formally when scheduled as part of school development planning time and teachers confer informally throughout the year. It is recommended that concise minutes of meetings be recorded and inserted in the subject department plan.
- A good start has been made in compiling a subject plan. The plan is presented in two
 sections based on a standard template and includes programmes of work for both MTW
 and CS.
- Further development of the subject plan should link specific items listed in the programmes of work with the teaching methods used in their delivery. Similar links should be made with the teaching resources to be used, including digital resources, with other topics across the curriculum, and with the planned learning outcomes. A tabular

- format could be found effective for recording this information. The plan should be reviewed annually in the context of the teachers' ongoing professional experience.
- Effective planning for individual lessons should be based on more detailed programmes of work. Reference to the links between lesson content and teaching methods should be used to ensure that the most appropriate teaching approaches and strategies are adopted.
- Teachers' recording procedures are adequate. Students' attendance and their achievement in homework, assessments and tests are recorded in the teachers' diaries. These records of students' progress are shared with parents at parent-teacher meetings. Parents are also kept informed by means of school reports and entries in the students' journals.

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.