Subject Inspection of Mathematics
REPORT

Coláiste na hInse
Laytown, County Meath
Roll number: 76103M

Date of inspection: 16 September 2011
REPORT
ON
THE QUALITY OF LEARNING AND TEACHING IN MATHEMATICS

INFORMATION ON THE INSPECTION

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<td><strong>Inspection activities undertaken</strong></td>
<td><strong>• Observation of teaching and learning during seven class periods</strong>&lt;br&gt;<strong>• Examination of students’ work</strong></td>
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<td>• Review of relevant documents</td>
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MAIN FINDINGS

• Teachers had prepared well for lessons and lesson aims were shared consistently with students.

• Project Maths approaches had been adopted in some lessons and good efforts were made to increase the levels of student activity in class.

• Students are encouraged to study Mathematics at the highest level possible and uptake rates at this level in the certificates examinations are very good.

• Two notable elements of the subject plan are the documented action plans for each year and the examination of published inspection reports on Mathematics.

• Maths week has been strongly supported in the school and its activities have been evaluated by both teachers and students. Students have also been surveyed on their experiences of Mathematics – a progressive practice for which the school is commended.

• It was particularly good practice to see teachers’ weekly schedules evaluated and amended, a clear sign they are working documents that are useful to teachers.

MAIN RECOMMENDATIONS

• There should be greater exploration of the reasons why particular approaches are taken towards finding solutions, and more frequent linking of lesson material to real life.

• Care should be taken to plan strategies for differentiation, particularly in mixed-ability class settings.

• Time should be set aside at meetings to focus on active teaching and learning methodologies.
INTRODUCTION
Coláiste na hInse is a co-educational school under the auspices of County Meath VEC with a current enrolment of 453 students. The school opened in September 2008 and at present has first to fifth year groups. Programmes currently offered are the Junior Certificate, optional Transition Year (TY) and established Leaving Certificate programmes.

TEACHING AND LEARNING
- The quality of teaching and learning ranged from fair in a significant minority of lessons to very good in a few. Overall, however, the quality was good.
- There was a good level of preparation for lessons by teachers and lesson aims were shared consistently with students.
- There were some lessons in which Project Maths approaches have been adopted and good efforts have been made to increase the levels of student activity in class. These included the use of group work, inviting students to work at the board and the use of mini-whiteboards. One lesson was particularly successful in this regard and generated clear enthusiasm among students.
- Students’ input to lessons should be promoted to a greater extent through, for example, allowing them share what they already know about a topic being introduced or encouraging them to answer questions posed by their classmates.
- The use of traffic lights as a self-assessment tool was effective in a number of lessons. There was also clear monitoring by teachers of students’ written work, which was generally of good quality.
- Greater exploration of the reasons why particular approaches are taken, along with more frequent linking of material to real life would serve to increase students’ understanding and develop more fully their problem-solving skills.
- Students engaged fully with the work of the class in all lessons and learning was taking place. Care should be taken, however, to plan strategies for differentiation, particularly for students in mixed-ability class settings.
- Classroom management was good at all times and teachers were supportive and affirming of students’ efforts.

SUBJECT PROVISION AND WHOLE SCHOOL SUPPORT
- The quality of provision and whole-school support for Mathematics is very good. There is good time allocation to the subject, and lessons are scheduled across the five days of the school week.
- Second, third and fifth-year groups are concurrently timetabled allowing very good access to the different levels of the subject. An additional class grouping has been set up in third year to support students studying at higher level.
- Students are encouraged to study Mathematics at the highest level possible and uptake rates at this level for the first cohort of students to take the certificates examinations are very good.
• Students who find the subject particularly challenging are identified and supported appropriately. Support is provided mainly in the form of in-class support or team teaching.

• In almost all cases, teachers are teaching classes in line with their qualifications and expertise. It is of note that a number of members of the mathematics team are currently undertaking further study in the area.

• Participation in continuing professional development (CPD) or further study is encouraged and facilitated by school management. Arrangements were being made at the time of the evaluation to ensure that all teachers could access Project Maths CPD.

PLANNING AND PREPARATION

• The quality of planning and preparation for Mathematics is good. A subject department structure has been established and a co-ordinator is in place. In line with good practice, the role of co-ordinator will rotate among team members. The team meets regularly and works collaboratively.

• It is clear that significant effort has been put into preparing the subject plan, which is in line with published guidelines. Two notable elements of the plan are the documented action plans for each year and the examination of published inspection reports on Mathematics. The ever-expanding folders of worksheets and tests for the use of all team members are impressive.

• The template currently being used by the teachers to prepare schemes of work is good. It could be amended to more closely fit the needs of the mathematics department as discussed during the evaluation.

• Formal meetings take place four to five times per year. It is recommended that time be set aside at meetings to focus on active teaching and learning methodologies. A good starting point would be the Project Maths teaching and learning plans that could be tried out in class and discussed at meetings. Successful approaches could then be adopted by all members of the team and, in time, incorporated into planning documentation.

• Maths week has been strongly supported in the school and it is particularly helpful that activities have been evaluated by both teachers and students. Students have also been surveyed on their experiences of Mathematics – a progressive practice for which the school is commended. This process will be completed when an action plan is put in place to address outcomes of the survey and the students receive feedback.

• All teachers made individual planning and preparation materials available during the inspection. It was particularly good practice to see weekly schedules evaluated and amended, a clear sign they are working documents that are useful to teachers.

The draft findings and recommendations arising out of this evaluation were discussed with the (acting) principal, deputy principal and 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.

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