

School Self Evaluation Report

Cabinteely Community School

Numeracy for September 2014 to May 2017

8th October 2015

Focus of the Evaluation

A self-evaluation of teaching and learning in this school was undertaken during autumn and spring term 2014-2015. Numeracy and how teaching and learning in all other subjects support the acquisition of numeracy skills were reviewed. The focus group were the first years.

School Context

Cabinteely Community School is a DEIS school in an urban setting. It is co-educational and multi-denominational. We are a mixed school with 530 pupils under the trusteeship of the Ursuline order, Archbishop's house and local ETB. Transition Year and Leaving Certificate Applied are well established. We have 12 feeder schools in our catchment area. There is a strong culture of Continual Professional Development in Cabinteely Community School

An SSE core group is established with representatives from a variety of subject subjects and disciplines. This core group was formed in August 2013 by requesting volunteers. At present there are representatives from Maths and Science, History and Geography, English, languages, practical subjects and learning support. Each volunteer agreed to act as a liaison person for the development of literacy and numeracy in their area. The core group met on a fortnightly basis in September, October and November. Numeracy link teacher and members of core team met with Department of Education inspector in November 2014 .

The Findings

Learner Outcomes

- Students standardised test results were analysed and compared with the national norms.
- Leaving Cert and Junior Cert result were analysed by the subject departments using the PDST tool and the school based questionnaire . This was carried out in order to use it as an indicator of existing standards. Findings and targets are to be recorded in respective subject department plans
- At the start of the year 2014/2015 we gave all first years a numeracy test. We targeted three specific areas: simple calculations, fractions and number patterns. The results were that 97% were able to complete the simple calculations, 25% were able to complete fractions and 38% were able to complete number patterns.
- As a result of these findings the SSE group decided to focus on **fractions** for 2014/ 2015. We decided to have a whole school approach with all teachers giving test results as a fraction and asking pupils to calculate it as a percentage for themselves. To reinforce this all classrooms now display a poster outlining a method for doing this along with worked example .

Learner Experience

- SSE group designed questionnaires on attitudes to numeracy and engagement in learning plus a questionnaire on teacher practices in relation to numeracy
- Parents of first years were surveyed in first term 2014/2015 to establish attitudes to numeracy in the home
- Questionnaire results were received from 95% of first year pupils and 60% of first year parents
- Results were analysed by core group and by staff at staff meeting

Teacher practice

- 95% of teachers state that students receive regular written /oral feedback for work .
- 76% of staff regularly ask students to justify and explain their rationale when answering a question
- 76% of teachers surveyed use concrete materials or link problems to real life
- 70% of teachers promote a positive attitude to maths
- 70% use graphs and charts as a teaching aid
- 65% use problem solving as a methodology in their classrooms
- 8% of teachers surveyed stated that there is a consistent approach to maths calculations and language across the school
- When using a calculator 8% of teachers ask students to do an estimate first

Sample Findings

- 97% of all teachers surveyed felt that maths skills help students do well in all subjects and 88% of parents feel that maths is important for more than just maths class
- 87% of all parents surveyed stated that maths were needed in life after school and 84% of students surveyed felt the same
- 75% of parents stated that their child liked maths while 40% of students surveyed stated that they liked maths
- 67% of Parents surveyed wanted their child to take higher level maths for Junior cert while 37% of students in first year stated that they would like to do so
- 68% of teachers were comfortable dealing with numeracy if it arises in their subject and 84% felt that they can help improve students numeracy skills
- A large majority of students liked working in pairs and small groups and 86% of teachers stated that pair work is used in their classroom
- 48% of students stated that they understand maths best when they work it out on their own while a further 46% stated that they learned best when the teacher explains their errors to them
- 55% felt that there was usually more than one way to work out a problem in maths
- 12% felt that they were good at explaining maths in their own words
- 8% of students learn maths through playing online maths games and 5% get a chance to learn maths by doing maths puzzles

Summary of School Evaluation Findings on Numeracy

Our school has **strengths** in the following areas of teaching and learning in relation to numeracy

- Parents in our school recognise the importance of numeracy as a life skill
- A majority of staff focus on the development and application of numeracy during their lessons
- A significant % of parents (69%)feel that they can help their children with their maths homework
- Learning outcomes are syllabus linked in 100% of lessons
- A large majority of teachers provide opportunities for students to learn in pairs or small groups. This supports the large majority of students surveyed who state that they like working in pairs and small groups and that they learn from each other.
- There is a whole school approach to the calculation of fractions to percentages
- There is a whole school approach to highlighting the use of maths in different subject areas

The following areas are **prioritised for improvement** in relation to numeracy see School improvement plan for details of SMART TARGETS

- Teachers to continue to focus on the development of numeracy as well as knowledge and skills
- To increase the percentage of pupils able to convert fractions to percentages
- To increase the number of students able to draw and interpret pie charts(link to fractions)
- To increase awareness among the students of the importance of maths in every subject area
- To increase the percentage of pupils able to complete number patterns
- To develop a consistent approach to maths calculations and language across the school
- To increase the number of students taking higher level at Junior and Leaving Certificate
- To promote a positive attitude to maths and numeracy
- To encourage students to do estimates prior to using a calculator

Progress on targets

Not applicable for 2015 as first year of the evaluation.