

School Improvement Plan – Numeracy – September/December 2012

Baseline data

- All pupils surveyed reported that they mostly work independently in maths.
- While almost 70% attain average or well above average, 12% are below the 30th percentile.
- While 50% of the pupils surveyed felt they are good at maths, 40% didn't know & 10% felt they are not.
- In the same survey, 87% of pupils felt they work most often in class on their own, while only 13% ticked the "In pairs" or "In groups" options.
- Almost 30% of the pupils in 2nd, 4th & 6th classes scored within the 80th-100th percentile & as such, would be considered extremely adept at maths.

Summary of main areas requiring improvements

- Attainment of curricular objectives in relation to attitudes: an increase in the number of pupils with positive attitudes to maths.
- Assessment: an increase in the number of pupils knowing how well they are doing in maths.
- More collaborative approaches will be developed in maths.
- Positive intervention for pupils attaining below the 30th percentile: additional work to be carried out with these children by the resource & general allocation teachers.
- Allocation of further resources in maths lessons when deemed necessary.
- Further initiatives to cater for the needs of the high achievers in numeracy tests.
- Rote learning of addition, subtraction & multiplication tables which provides the foundation for maths & greatly enhances a child's ability to problem-solve.
- A further development & enhancement of mental maths throughout the school.
- Focus attention on estimation and place value.

Improvement targets

- To increase the amount of collaborative time in maths lessons.
- To develop strategies during resource & learning support sessions, which will assist the very weak children in maths.

- The purchase of maths materials, which will aid & assist weaker children in understanding mathematical concepts & further stretch the mathematical abilities of the high achievers.
- To visibly see a significant improvement in the children's ability to add, subtract & multiply & to incorporate this into the area of mental maths quizzes to further consolidate tables & the fundamental formulae in numeracy.

Required actions

- Implement agreed teaching approaches based on the feedback from pupil questionnaire.
- Implement pair work & group work for problem-solving.
- Review current practice in relation to assessment approaches using the NCCA review tool.
- Implement recommendations of the four resource teachers & the two general allocation teachers in relation to improving the weakest children's conceptual & mathematical skills development.
- The setting aside of a financial budget to purchase mathematical materials which are deemed necessary.
- Implement a policy of rote learning of addition, subtraction & multiplication tables & set aside sufficient time on a weekly basis to promote mental maths in each classroom.

Success criteria/Measurable outcomes

- A perceptible & measurable improvement in tables & the pupils' ability to understand & answer basic mental maths.
- Clear progress in paired & collaborative group work for problem-solving.
- Having re-administered the pupil survey, the percentage of pupils reporting that they like maths will increase.
- Having re-administered the attitudinal survey, the percentage of pupils reporting that they know how they are doing in mathematics will increase.

Persons responsible

- Each class teacher is responsible for the implementation of the school improvement plan in numeracy in his/her classroom.
- The resource & general allocation teachers, together with the class teachers are collectively responsible for improving maths outcomes with the weaker children in the school.
- The Principal, Deputy Principal & Assistant Principal have overall responsibility for the school improvement plan.

- The continued attendance & participation of the Principal & Deputy Principal in Professional Curricular Development in numeracy.

Timeframe for actions

- Staff reflection & planning immediately after Christmas.
- Implement from mid-January of Year 1.
- Review current practice: at first Croke Park meeting in 2013.
- Implement by Easter of Year 1.

Monitor and review

Targets:

- Monitor progress at staff meetings in Term 2. Review at the end of year staff meeting.
- Teaching approaches reflected in the cuntasmíosúil.
- Targets shared with pupils in order that on-going of monitoring can be done informally by teachers & Principals.

Signed : Rev. W. Fitzmaurice. Date 14/01/2013

Addendum: Year 1 Priority Action

Rote learning of addition, subtraction & multiplication tables which provides the foundation for maths & greatly enhances a child's ability to problem-solve.

Evaluation of Year 1

It was felt that the rote learning of tables had a very beneficial effect on the children. They became more aware and more conscious of numbers and it helped greatly in their understanding of mathematical concepts. It also assisted in the children's own perception of how well they are doing in maths, as addition and subtraction in the lower classes and multiplication and division

in the higher class became less onerous for them. It was agreed that rote learning would continue as an integral part of mathematics for the duration of the School Improvement Plan.

Signed : Rev. W. Fitzmaurice. Date 06/05/2014

Year 2 Priority Action

Following prolonged debate and discussion it was unanimously agreed that year two will focus attention on place value. It is believed that this process will greatly assist the students in comprehending the meaning and value of the decimal point. While the use of calculators is encouraged in class as a means of ensuring that the children get the correct answer, other strategies such as mental maths games and engagement with concrete materials and resources will further the pupils understanding of mathematical concepts and place value.

Signed: Rev. W. Fitzmaurice Dated: 06-05-2014