



School: An Grianán National School
Team: Our team was made up of three mainstream classroom teachers and one SEN teacher. Ann Kearns (SEN teacher), Carmel Rooney (5th class teacher), Carmel Keogh (4th Class teacher) and Dolores Killian (3rd Class teacher)



Our School Context

An Grianán NS is a co-educational, vertical primary school under the patronage of the Catholic Bishop of Ardagh and Clonmacnoise. The school is situated in the village of Mount Temple, Co Westmeath and has an enrolment of 185 pupils. There are 7 mainstream class teachers, one administrative principal, 5 SEN teachers and 5 SNA's on staff. An Grianán opened its doors on its current site in 1964. Prior to this school was based in the local Community Centre in the village. Since 1964 the school has grown in terms of numbers and size. In 2014 it celebrated its Golden Jubilee with a special Mass.



Our Goal

For pupils to have the confidence to communicate effectively and work collaboratively in order to become autonomous learners.

Research Question

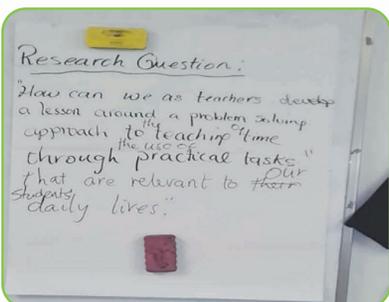
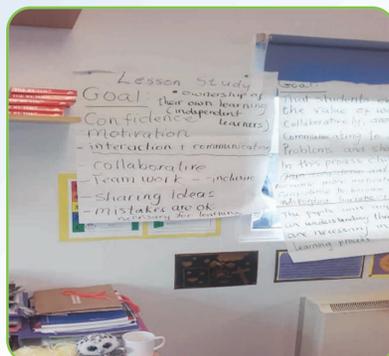
"How can we as teachers develop a lesson around a problem solving approach to the teaching of time, through the use of practical tasks that are relevant to our pupils daily lives."

Planning Process

The planning process provided teachers with the opportunity to work collaboratively around a content area in maths that they felt that students in their classrooms were finding difficult: Time

On Day 1 of the Planning process, we decided on our goal, our research question and we began planning the research lesson. We decided to work on an observation template in tandem with writing our research lesson.

On Day 2, we further planned our research lesson and the observation template. At each point of the lesson, we discussed the observer's role. Each observer focused on one table and observed this group during the lesson. We planned the questions in each section of the lesson in advance. We looked at possible problem areas in advance of the teaching the lesson. We had a good range of methodologies to deliver the lesson



objectives. We always considered our overarching goal throughout all stages of the planning process. In planning our research lesson, we wanted to ensure that there were lots of opportunities for the students to communicate effectively and to work collaboratively. It was then decided who would teach the lesson and in which class. It was decided to teach the lesson in 4th class with the fourth class teacher, Carmel Keogh. The Research lesson was conducted on Wednesday, January 24th 2018.

Teachers' Reflection on the project

Key learning

At our reflection meeting after we conducted our research lesson:

- it was felt that at the beginning of the lesson, we missed opportunities for more in depth discussion. The questions were mostly aimed at the lower order skills, understanding and recalling.
- pupil questioning: It was felt that the questions we asked in our lesson plan were mostly closed questions and we should have allowed for more open ended questions that would allow for greater discussion.
- it was felt that the students needed more opportunities to work together in pairs and in small groups. It was noted that they did not know how to work together to solve problems collaboratively.
- we needed to consider differentiation more and to set more extension activities for the students who need to be challenged more.
- it was also noted that the students really struggled to explain their strategies articulately to each other. They also found it very difficult to actively listen to each other's strategy. It was noted that they mumbled and were not sure how to communicate their thinking

Implications of Lesson Study for whole school teaching of mathematics

All teachers involved in the Lesson Study Cycle agreed that they wish to carry on Lesson Study in their school as a form of CPD. The areas that the teachers were most interested in developing which was highlighted throughout this process were:

- a plan for teaching mental maths strategies with clear learning outcomes, i.e. use of the Empty Number Line to solve elapsed time rather than reliance of the algorithm.
- to provide greater opportunities for differentiation in their lessons.
- to provide greater opportunities for talk and discussion and opportunities to work collaboratively.
- to make greater use of using more open ended questioning in their maths class.

Opportunities

It was agreed during our reflection meeting that Lesson Study provided opportunities which allowed teachers to:

- evaluate your own teaching and be reflective of their own practice
- observe the children and this informs our own teaching
- to experience the difficulties pupils experience in maths
- to see the importance of talk and discussion as a central part of maths classes.
- use of the Empty Number Line as a strategy to calculate elapsed time rather than the algorithm
- it allowed for peer learning & support from colleagues
- courage to try out new methods and strategies