# National Literacy and Numeracy Week 2008
## Project Report

**Project title:** Space and Geometry Field Day

**Project description:**
A whole-school event in which students, parent and teachers explored Space and Geometry concepts through practical hands-on activities and discovered various relationships and elements.

Students were placed in groups (approx 10 students per group). These groups then rotated around 10 different learning centres during the day. There was a primary rotation as well as an infants’ rotation. This allowed the activities to be suited to the students’ ability levels.

At each learning centre, students explored fun, practical space and geometry activities, assisted by parents and teachers.

**Person responsible for project:**
Narelle Gregory

**School, region, diocese:**
Nabiac Public School, North Coast Region

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**Number of students, teachers, parents, other community members directly involved:**
- all students – 235
- all teachers – 12
- all parents invited – approx 20 attended.

**Intended literacy and/or numeracy outcomes:**
- improvement in overall numeracy by addressing an identified school weakness of space and geometry
- positive attitude towards maths
- students actively involved in learning
- deeper understanding of space and geometry concepts through the exploration of relationships
- experience maths in a fun, practical and hands-on manner
- community involvement in a learning based activity.

**Evidence of achievement of intended literacy and/or numeracy outcomes:**
- A more positive attitude towards maths developed through the enjoyment of fun practical maths activities: “The number of parents that turned up today suggested that they are feeling less stress by maths and can see that maths can be fun,” was one teacher’s comment.
- Great opportunity for students to recognise that maths is all around them. The activities were really engaging, many containing a problem-solving element that required the students to really think.
- The exploration of relationships developed a deeper understanding of space and geometry. “Seeing children thinking, solving and understanding is a positive thing,” one parent stated.
Maths was experienced in a fun, practical and hands-on manner – 94% of teachers believed that the students were actively engaged in their activities.

100% of parents rated the day as worthwhile, engaging and enjoyable. “I had more parents visit my activity than I have seen in the school for some time for an educational based activity,” said another teacher.

NABIAC PUBLIC SCHOOL
MATHS FIELD DAY

DESCRIPTION

A whole school event in which students, parents and teachers explore Space and Geometry concepts through practical hands-on activities and discover various relationships and elements.

At each learning centre, students explore fun, practical Space & Geometry, assisted by Parents and Teachers.
Intended Outcomes

- Improvement in overall numeracy by addressing an identified weakness of Space & Geometry
- Positive attitude towards maths.
- Students actively involved in learning centres.
- Deeper understanding of Space and Geometry concepts through the exploration of relationships.
- Experience maths in a fun, practical and hands-on manner.
- Community involvement in a learning based activity.

ORGANISATION

- Infants and Primary rotations.
- 10 activities per rotation.
- 25 minutes per activity.
- Hands on activities supervised by teachers.
- Parents circulated with their children.
Sample Activities

- Position
  - Activity - Orienteering - Students will follow compass coordinates to complete courses that were designed to represent shapes.
- 2D
  - Activity - Symmetry - Students will use mosaic tiles to create a symmetrical design.
- 3D
  - Activity - 3D Construction - Students will construct 3D objects and explore the relationships between sides, angles and vertices.
- Angles
  - Activity - Pathways with Angles - Students will construct pathways using right angles.

There is an activity card for each Learning Centre and students complete a page in their workbook.

Students got their passports stamped at the end of each activity.

At the end of the day the students showed their completed passports and received a ribbon for participating.
Statistics

The Maths Field Day proved to be very successful and engaged the students most of the time.
- 93% of students gave a positive feedback.
- All activities had a minimum 80% positive approval rating.
- 100% of teachers thought the concept of field days was worthwhile.
- 94% of teachers believed that their students were actively engaged in their activities.
- 100% of parents rated the day as worthwhile, engaging and enjoyable.

Comments

The comments received from students, teachers and parents are a reflection of the overwhelming positive response to the field day.

Students comments include:
- I think maths field days are awesome.
- It was an incredible day
- Great Day!
- Fun and exciting!
- I had a fun day with my Dad.
- I really liked the whole day.

Teachers comments include:
- Great opportunity for students to recognise that maths is all around them.
- The activities were really engaging. There was a problem solving element that required students to really think.
- The number of parents present today suggests that they are feeling less stressed by maths, and can see that maths can be fun.
- Great preparation, great activities, a very worthwhile day.
Parents comments include:
- All students enjoyed the hands on experience of the whole day. It was good to see all children happy and involved.
- Congratulations for delivering an interesting and educational set of exercises for all students. It was refreshing to see teachers and students working together in such an atmosphere.
- Seeing children thinking, solving and understanding is a positive thing.
- Field days like today can only be a great thing. Look forward to the next one.
- I had a great time and from what I saw, all the students enjoyed themselves and had fun learning.
Feedback about making grants available for such projects:
Grants, such as this, make projects like ours, possible. Even though the grant didn’t fully fund the event, its assistance was greatly appreciated. It helped to purchase valuable resources that were utilised on the day and will now be incorporated into all classrooms.

The Space and Geometry Field Day was an outstanding success. Thank you.