

RANDWICK BOYS' HIGH SCHOOL NUMERACY POLICY

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Preamble:

Numeracy is a fundamental component of learning across all areas of the curriculum. The development and enhancement of students' numeracy skills and understanding is the responsibility of all teachers across all key learning areas.

Numeracy is the ability to use mathematical ideas efficiently to make sense of the world. Each individual's interpretation of the world draws on understanding of number, measurement, chance, data and spatial sense combined with critical mathematical thinking, applied to a wide variety of contexts.

A numerate individual is one who has the ability to interpret, apply, evaluate and communicate mathematical information in commonly encountered situations to enable full, critical and effective participation in everyday life.

The successful evaluation of this policy will be measured by improvement of student numeracy from Year 7 to 12.

NAPLAN, School Certificate and Higher School Certificate data and teachers' professional judgement, as well as school based assessment tasks and tasks completed in class will be used to identify areas of need in student numeracy.

This policy addresses the dimensions of pedagogy outlined in the *Quality teaching in NSW public schools* document. Pedagogy refers to:

- Promoting high levels of intellectual quality (higher order thinking skills),
- Promoting a quality learning environment,
- Making explicit to students, the significance of their work (Quality teaching in NSW public schools).

Often pedagogical learning can be achieved by also asking the following four key questions:

- What do we want the students to learn?
- Why does that learning matter?
- What are you going to get the students to do (to produce)?
- How well do you expect them to do it?

Is Mathematics different to numeracy?

- In Mathematics the emphasis is usually on understanding mathematical concepts (such as numeric calculations and statistical data)
- With numeracy, the emphasis is on the use of quantitative, spatial and measurement skills and chance concepts as they apply to everyday activities such as shopping or reading a newspaper.

Policy:

This policy determines how Randwick Boys' High School will ensure that students' numeracy is across all KLA'S. Numeracy is a fundamental component of learning across all areas of the curriculum. Every day, students are given tasks to complete, problems to solve and objects to make that require thoughtful and practical use of mathematics.

To be successful in any of the Key learning Areas, students need subject-specific numeracy skills. All teachers are responsible for the explicit development of the numeracy skills of students in their classroom. In any given unit of work in each KLA, teachers need to identify the specific numeracy skills that are needed to achieve syllabus outcomes and plan explicit teaching activities to assist students in their learning.

Purpose:

The purpose of this policy is to make clear to all stakeholders the ways in which Randwick Boys' High School will:

- Program teaching with a focus on improving students' numeracy,
- Explicitly teach numeracy in all subject areas,
- Explicitly assess students' numeracy in formal and informal assessment tasks,
- Report on students' numeracy
- Support teachers in the professional learning in relation to mathematics and the teaching of numeracy.

Policy Procedures:**Composition of the Numeracy Team:**

- The School's Numeracy Team will be led by Head Teacher Mathematics and other members of staff who demonstrate interest and capacity in improving student numeracy.
- The Numeracy Team will have representatives from various faculties. The team aims to assist students achieve to the best of their potential. The Team/Executive would analyse NAPLAN results, School Certificate and Higher School Certificate results.

School Numeracy Plan:

In consultation with the executive the following school numeracy plan will be put forward from mid 2009 to 2011

- Numeracy Day for Year 10 prior to the school certificate to improve numeracy significance of numeracy across all key learning areas (refer to the syllabus numeracy component in each subject KLA).
- Introduction of "Counting On" during DEAR from 2010. Students identified as having numeracy problems will be paired with students with stronger numeracy skills and peer tutored. A teacher volunteer will be able to assist in this process and thus this will be their DEAR.
- The introduction of Mathletics across the junior school.
- Data analysis results will identify weaknesses in specific numeracy stands. The focus will than be to develop strategies to tackle these identified weaknesses. Strategies will be put forward to improve identified strands. e.g.
 - use of "ILC" center
 - use of the "Support Teacher Learning"
 - Numeracy team to in service school staff to develop expertise/collaborative teaching strategies in dealing with identified weaknesses.

Suggested strategies that can be used to improve numeracy

Pre testing	Acceleration	Problem Solving
Post testing	Competitions	Team Teaching
Enrichment	Creative Thinking	Grouping
Backward Mapping Assessment	Outcome based Assessment	Evaluation

Teacher Professional Learning and Support:

- Development of staff expertise in the teaching of numeracy will be a priority for the school. This will be reflected in the school plan, annual school report and Teacher Professional learning budget
- Programming time should be allocated within each faculty to ensure that numeracy is evident where possible in each unit of work, assessment tasks and student reports.
- Teacher Professional Learning Funds may be sought where faculties seek to undertake large planning or programming tasks in relation to numeracy, consistent with school priorities. Such applications should be made to the Deputy Principal responsible for TPL.