

The Numeracy Audit[®]: An overview

Purpose

The *Numeracy Audit*[®] is a process through which teachers can collect information about numeracy within the school in order to plan improvement strategies. The focus for this process is numeracy across the curriculum. Student performance in mathematics is only looked at as a reflective question once information about numeracy across the curriculum has been collected, collated and analysed

Goals

The *Numeracy Audit*[®] has the following goals for benefit of the whole school community:

- Teachers' will become better informed about numeracy demands across the curriculum.
- Teachers' will develop skills in recognising numeracy demands in their classroom and their curriculum; and therefore students' performance in relation to numeracy.
- The school will be able to make informed judgments about the extent to which numeracy requires action and where that action should be directed.
- Students' will have greater opportunities to develop numeracy, as teachers will extend their knowledge of numeracy teaching strategies.

Key Questions of a Numeracy Audit[®]

In order to achieve these goals the *Numeracy Audit*[®] provides teachers with information, which enables them to respond to the following questions.

1 What is numeracy and numerate behaviour?

- Do teachers have a common view of numeracy?
- How confident do teachers' feel in providing opportunities to develop numerate behaviour and in recognizing student numerate behaviour?

2 What is the school doing with regard to numeracy?

- How do our curriculum documents refer to numeracy?
- How do our school documents refer to numeracy?
- How do our own teacher documents and planning refer to numeracy?
- Are students being provided with enough opportunities to develop numerate behaviour?

3 How well are our students developing numerate behaviour?

- What do our students think numeracy is?
- How well are students responding to classroom tasks make numeracy demands on them?
- Are they responding fluently where expected?
- Are they using mathematics in their learning strategies and for understanding the context?
- Are they being constructively critical of the mathematics they use?
- Do our students know how to go about improving their own numeracy?

4 How effective are current practices for developing students' numeracy.

- What should we do more of?
 - Are there aspects of classroom activities we should do less of?
 - What could we start doing to improve student numeracy?
-

Key Questions of a Numeracy Audit[®]

In order for all students in a school to gain the maximum benefit from the *Numeracy Audit*[®] it is highly recommended the whole school make numeracy a priority. This enables all teachers' to continue the development of numeracy practices and directly improve student outcomes. The *Numeracy Audit*[®] provides all staff with the opportunity to engage with the process in an active and thought-provoking manner.

Having said this, it is possible to conduct a *Numeracy Audit*[®] over a subset of the school. That is, to look at it in the context of one phase of schooling (eg K-3), a year group (eg year 8), a course (eg Vocational Course), a learning team (eg year 5-8 middle school group), a Learning Area (eg Science), or a group of interested teachers. Indeed a teacher could conduct a *Numeracy Audit*[®] on their own practice in their own classroom.

As a minimum the audit requires participating staff to be prepared to:

- be interviewed;
- have their curriculum planning viewed;
- have their classroom practice observed;
- have their students' work analysed and; finally,
- attend a meeting to engage in discussion about the findings of the audit, the meaning of numeracy and the ensuing plan of action.

Following is a list of the steps involved in the *Numeracy Audit*[®]. These steps can be taken by any number of interested teachers. However, it helps with developing effective collaboration, a richness of ideas and a whole school perspective if a group of three teachers run the audit with one of the group being from the school leadership team.

The *Numeracy Audit*[®] requires the school audit team to have access to professional development about numeracy and also training in the research techniques used. This external support can be provided by accredited external consultants, reading materials provided in other sections of this document and or via the *Numeracy Research Circle*[®] process. However it is done the following key steps are seen as necessary for the audit to be carried out in full.

The Key Steps in Conducting a Numeracy Audit[®]

Collect background school information.

Identify staff perceptions of numeracy.

Find out what students think.

Examine school and curriculum documents for descriptions of numeracy.

Review teachers' own curriculum documents for references to numeracy.

Collect examples of what actually happens in the classroom.

Analyse, collate, and display data.

Discuss and identify issues arising from the information collected.

Plan future action including working with parents.

Continue with an ongoing cycle of research.