Linking **SNAP 2006**
to the Curriculum
Linking SNAP to English

Numeracy is the ability to effectively use the mathematics required to meet the general demands of life at home and at work, and for participation in community and civic life. Numeracy is a fundamental component of learning across all areas of the curriculum. The role that teachers of English play in the development of numeracy is to identify the specific numeracy skills that are needed to achieve the syllabus outcomes and to plan explicit teaching activities to assist students in their learning. These activities provide students with opportunities to select, use, evaluate and communicate mathematical ideas in a range of situations.

Numeracy in English is the ability to use language to discuss and apply mathematical ideas and concepts. The oral, visual and written texts which students are reading, viewing, responding to and composing may require some numeracy skills. This is particularly the case if students are expected to engage with texts beyond literal into inferential, analytical and critical interpretations. Students need numeracy skills that are specifically useful in developing knowledge, skills and understandings in English.

Numeracy skills required in English and assessed in SNAP

**Working Mathematically**
- Asking appropriate numeracy questions
- Communicating with appropriate numeracy terminology
- Providing reasons for solutions
- Relating numeracy skills in one situation to the numeracy skills in another situation

**Number**
- Using number facts
- Calculating with whole numbers
- Calculating with decimals and fractions
- Predicting results from sample data
- Using chance words, percentages and fractions to describe events
- Describing the likelihood of events
- Using samples to make predictions about larger populations

**Data**
- Identifying data in tables, charts and graphs
- Organising data in tables, charts and graphs
- Interpreting data in tables, charts and graphs

**Measurement**
- Understanding time

**Space and Geometry**
- Locating position using grids
- Using compass directions
- Using precise terminology to give position
- Using scale

The syllabus referred to is *English Years 7–10 Syllabus*, Board of Studies, April 2003.
Tour de France

In these questions students are required to identify data and calculate a correct total, a difference and elapsed time, as well as a start and finish time. Students are also required to use a scale to calculate a correct distance and use a process to determine average speed.

In English, students are often required to read, interpret and extract information from a variety of sources to build field knowledge about a subject in preparation for the composition of such texts as film and documentaries. During composition, students engage in the processes of imagining, drafting, appraising, reflecting and refining. It is imperative that they are equipped with the necessary skills to deconstruct information presented in maps and tables in order to use this information effectively in composition.

Teaching strategies

When students are studying the composition of factual texts, such as documentaries and news reports, they are required to locate, analyse, interpret and use appropriate information from a variety of sources. When this information is presented in a map or tabular form with numerical data, students are required to analyse, select and use the appropriate information. They are also required to think critically, making decisions about what information is the best to use in achieving their purpose.

1. Explain to the students that they will be critically analysing a selection of texts in order to gather information and assess their suitability of use in the composition of a short documentary/news bulletin on the Tour de France. Brainstorm what students know about the race. Record this information on a mind map. Discuss where the students have sourced this knowledge.

2. Talk about the process a composer goes through when gathering information in preparation for a documentary or news bulletin. Discuss what sort of information is usually included. Ask the students what sources they think a composer/reporter would use when gathering this information.

3. In pairs, students list information about the Tour de France they would need to incorporate in their documentary. For example:
   - length of the race
   - route
   - organisation of race (in stages)
   - number of stages
   - length of each stage

4. Introduce the map of the Tour de France to the students. Discuss the value of information sourced from a map. Ask the students how they would go about extracting the information they require for their documentary/news bulletin from this source.

5. Provide a scaffold for students, to interpret the information provided in the map, by posing the following questions:
   - What is this a map of?
   - What information is presented in the map?
   - How do you read this map?
   - What is the importance of the key? (the key is a list of words or phrases that explains the symbols used in a map)
   - What is the relevance of the compass point and why would you use this? (when explaining the direction the race travels in, for example, 'From Troyes riders travel north-east to Nancy'.)
   - How do you work out the distance between each stage of the race? (use a ruler or piece of string to measure the distance between the two points on the map and then convert this into kilometres by using the scale: 15 mm = 100 km)
Teaching strategies (cont’d)

6. Working in pairs, students use the map to find the answers to the questions asked in step 5.

7. Discuss in which section of the news report this general information would usually be included (the introduction). Ask the students to consider what other information would be included in a story like this in addition to the general information gathered so far.

8. Introduce to the students the information about the four Australian students visiting France who rode Stage 6 of the race (See Part B – Stage 6 and Part C – Fitness Plan). Explain to the class that they are to include information about these students from these two sources in their documentary/news bulletin.

9. Ask the students to work in pairs to extract all of the available information from these two sources. Explain that before they can make decisions on the suitability of information for inclusion, they must first access all available information. Support the students in completing the missing information in both tables.

10. Discuss which information about the students’ preparation for, and subsequent participation in the race, would interest the audience. Talk about the importance of making the right decision when selecting how much information to include in the story in order to achieve the purpose.

11. Explain that now they have completed the process of gathering their background information from a variety of sources they can now start on the composition of their news bulletin.

Syllabus reference

Stage 4 Outcome 7: A student thinks critically and interpretively about information, ideas and arguments to respond to and compose texts.

Students learn to:

7.1 locate, assess, select, synthesize and use information, ideas and arguments from texts
7.2 compose and respond to factual, opinion, argumentative and persuasive texts
7.4 distinguish between relevance and irrelevance and the familiar and unknown in texts
7.9 make predictions, infer and interpret texts

Students learn about:

7.12 the language of factual texts including impersonal language, passive voice and compressed forms of presentation
7.15 ways of organising information, ideas and arguments textually or visually
Questions 6a, 6b, 6c, 6d

In these questions students are required to compare and calculate with fractions, calculate a difference between two large numbers, round a four-digit number to the nearest hundred and multiply a five-digit number by a single digit.

In English students are often required to read, interpret and manipulate numerical information presented in tabular form. The analysis and use of statistical information, such as that contained in the table Advertising Costs, is necessary when deciding where to place texts in order to have the most impact on the intended audience. Product placement in advertising is instrumental in determining how successful the sale of a product can be.

Teaching strategies

In teaching about the composition of advertisements it is important that students are able to plan, draft and edit to produce a polished text that achieves its purpose and satisfies its audience. The decision in relation to the suitable placement of this advertisement is crucial in reaching the target audience and thus maximising sales and the effectiveness of this text.

1. Explain to the students that in today’s lesson they are going to take on the role of advertising executive to decide on the best place to run an advertisement their team has recently produced.

2. Brainstorm all the things that need to be taken into consideration when deciding on possible product placement in advertising. These would include:
   - target audience for advertisement
   - magazine audience
   - magazine sales over a period of time
   - cost to run advertisement in magazine
   - size of advertisement

3. Introduce the table Advertising Costs to the class. Explain to the students that they are going to use this table to decide on the best magazine in which to place their advertisement.

4. Provide a scaffold for students to interpret the information provided in the table, by posing the following questions:
   - What are the possible magazines the students can choose from?
   - Who do you think the target audience would be for each magazine?
   - Which magazine sells the most copies per week?
   - Why do you think this magazine is the most popular?
   - Should the decision on where to place the advertisement be made purely on the number of copies sold? Why/why not?
   - How can you use the table to work out value for money?

5. In pairs, students decide in which magazine they will place their advertisement. They must justify why they have chosen that particular magazine over the other possible choices. Students must incorporate numerical data in their justification.

Syllabus reference

Stage 4 Outcome 8. A student makes connections between and among texts

Students learn about:

8.5 the ways in which meaning is shaped by form, structure, style, personal perspective and by the composer’s purpose and audience

8.7 the way composers use stylistic features, content and marketing to develop and promote popular appeal

8.10 strategies used in presenting information, opinions and perspectives in different media texts