

LITERACY STRATEGIES IN YEAR 10 AGRICULTURE

In 1999 four technology teachers from the Ryde and Hornsby districts participated in action research projects. These projects investigated how literacy strategies could be used to enhance student learning in Stage 5 Agriculture, Computing Studies, Food Technology and Technics.

Year 10 Agriculture

When Karen Heap agreed to participate in this project she looked at her Year 10 Agriculture program for Muirfield High School and was surprised to find that it was studded with literacy development activities!

Karen's surprise is not unusual. Teachers often do not recognise the complexity of their own teaching practices. Effective technology teaching includes strategies which enhance literacy skills.

Here are just a few features of her work with Year 10.

Oral preparation: Talking to prepare and support reading and writing

The ability range in Karen's class was very wide. To ensure that all students could participate in reading and writing work, she always encouraged students to talk an activity through, either as a whole class or in small groups.

Using professional reading materials in agriculture

Newspapers, magazines, brochures and the Internet are the major sources of information for agriculture professionals. One activity for Year 10 centred on the large collection of agricultural newspapers which come to the school each year. Students selected articles which they considered interesting or significant, then sorted them into topics in folders. These folders were intended to be reference collections for senior classes. In carrying out this organisation, the class discovered that topics of the senior curriculum appeared frequently. Finding the extent of relevance of the syllabus to the real world was quite motivating for the students.

Newspaper/ State Published: <u>The Land</u>	Summary: <u>Tramline Marking Systems</u> <u>uses a trailer towed with a ripper</u> <u>tyre towed by a ute which uses</u> <u>GPS (global positioning system) to</u> <u>drive up and down paddocks</u> <u>to mark lines at set distances</u> <u>apart as a guide for farmers</u> <u>using equipment to prepare, plant</u> <u>or harvest crops both during the</u> <u>day & night</u>
Date of Publication: <u>February 4, 1999</u>	
Name of Article: <u>Tramlines for traffic farming</u>	
Author: <u>Carol Trainor</u>	
Why Did You Choose This Article: <u>It looked interesting and was</u> <u>showing the use of technology</u> <u>in farming</u>	

Some of the topics they established were beef cattle, dairying, sheep meat, sheep wool, social changes and the effect on rural communities, land management, cropping, other animals.

A worksheet required students to state why they chose an article and to give a summary. Students discussed which style of writing was most appropriate for the task, either in note form or writing in sentences.

The best summary worksheets were later added to the folders as abstracts.

Class discussions about the reasons for the choice of articles meant that vocabulary needed for special topics was talked through and many agricultural issues were addressed. This developed a context for and a familiarity with the specialist language—necessary for all students, but particularly for those least inclined to read—so that they can make use of the adult press.

The package *Assisting Year 7 students who need additional support: Follow-up to ELLA* was issued to all schools in 1999. Within it, the *Programming and strategies handbook* is crammed with ideas relevant to all years in the secondary school. *Section 4d: General reading strategies* is particularly useful for this stage of helping students over the threshold into professional-level reading.

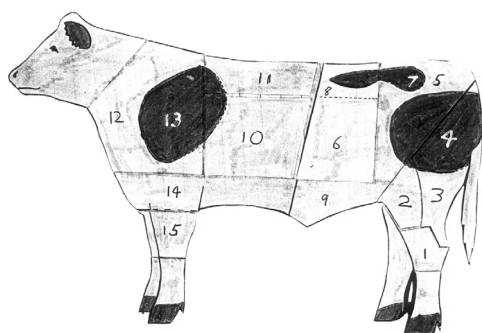
Product orientation: Information in tables

In this sequence Karen was focusing on investigating the terminology for and value of specific beef cuts.

First students cut out and assembled a paper jigsaw puzzle of beef cuts.

Next they discussed a list of names of cuts so that the students heard all the words and had practice in pronouncing them as well as writing them.

While students labelled their diagrams with numbers from the list, the new vocabulary was kept in circulation orally by class discussion of the size of cuts and of other criteria, such as the percentage of fat and bone.



Using and creating information in tables is an important literacy demand in agriculture, as is the ability to move between identification codes and diagrams and word information. For example, much information about sales and animal condition is conveyed in tables in newspapers, pamphlets and on the Internet.

A friendly butcher provided a frozen sample package of each cut. Karen removed the word labels and replaced them with A, B, C, etc. Students had to predict the name of the cut for each sample and write their guesses in a table on a worksheet.

After further discussion of the criteria for each cut, a correct list was compiled, and students recorded these decisions on a fresh copy of the worksheet.

Finally the samples were thawed and barbecued (even the gravy beef!) and each student had a small portion of each sample to rate on taste and tenderness.

Eventually a class rating was established by discussion.

For homework, students had to visit local butcheries and find out the cost of each cut per kilogram to clarify which cuts were the most expensive.

Throughout these discussions the terminology for the cuts of beef, and the language necessary to evaluate the cuts of meat and to consider market-driven forces, were constantly practised.

Sample	Name of Cut	Taste	Tenderness	Appearance	Price/kg
A	Filet	2-3	3	4	\$27.99
B	T-bone	2	4	3	\$14.99
C	gravy beef	2	5	4	\$6.39
D	scotch fillet	1	2	3	\$18.99
E	Chuck	2	3	4	\$3.99
F	round	2	2	2	\$8.99
G	blade	2	4	1	\$8.99
H	Sirloin	5	3	4	\$8.99
I	silver side	2-3	3	4	\$9.99
J	Topside	5	5	5	\$10.99
K	flank.	2	2	2	\$9.99

Rating: 1 Excellent 2 3 Good 4 5 Poor