Increasing the Literacy, Language, and Numeracy Skills of the Workforce is a Key Government Priority.

Literacy, language, and numeracy skills provide the essential base for building a competitive, highly-skilled and productive workforce.

In addition to the many economic benefits of higher literacy, language, and numeracy skills, social benefits include improved health, housing and community participation. Intergenerational impacts include more active involvement by parents with higher literacy and numeracy levels in their children’s education.

The Tertiary Education Commission (TEC) is providing funding to polytechnics to assist with the development of literacy and numeracy resulting in better outcomes for learners.

One strategy that is used is “Embedded Literacy”. Embedded Literacy is explained as ‘concurrently developing language, literacy and numeracy and vocational competence as interrelated elements of one process’ (Courtenay and Mawer, 1995).

Approaches to embedding literacy and numeracy are more likely to be successful where the links between literacy, numeracy and vocational learning are identified clearly and explicitly. In particular, vocational, literacy and numeracy tutors need to understand the ways in which literacy and numeracy are used in vocational tasks and the literacy and numeracy demands of the learning environment.

Research into effective embedded literacy and numeracy approaches emphasises the importance of the relative timing of literacy, numeracy and vocational instruction. To be effective, literacy and numeracy support needs to be delivered as it is required for the instructional or vocational task at hand. This ensures that the literacy and/or numeracy delivered is “wholly and immediately relevant.”

Case Study

The WelTec Literacy and Numeracy Strategy identified a number of programmes with students having low literacy levels. The Automotive programme was ranked highest for literacy and numeracy development. It is one of eight programmes (ranging between levels 2 and 3) that Weltec has earmarked for literacy and numeracy embedding.

In 2009, tutors from the Language Literacy Numeracy (LLN) team have been attending year 1 classes in the Certificate in Automotive Technology, which is from levels 2 – 4 on the National Qualifications framework.

At the start of the year the LLN team developed an assessment linked to the TEC Adult Learning Progressions. The assessment was administered across all eight programmes in order to determine the classes which had students most in need of literacy/numeracy support and therefore the classes most likely to benefit from the input of a literacy embedding tutor.

What are the Learning Progressions?

The learning progressions describe the main elements or strands of learning that adults require in order to:

• Listen with understanding
• Speak to communicate
• Read with understanding
• Write to communicate
• Make sense of number to solve problems
• Reason statistically
• Measure and interpret shape and space.
The LLN tutors regularly attended Automotive classes where they worked alongside the students assisting them one on one and in small groups. They also developed materials for activities which they gave to the Automotive tutors for use in class. Such activities included:

- specialised terms and their definitions on cards for matching;
- sorting the advantages and disadvantages of two types of ignition systems and placing them under the relevant headings;
- a cloze exercise for revision.

**Abrasive**

**hard substance used for grinding or sharpening**

An example of a specialised term, and definition

As well as the activity, the tutor received instructions on how to run the activity and some reference to where it fits with the Learning Progressions.

The LLN tutors also met with the Automotive tutors to discuss alternative and effective ways of teaching in order to optimise the learners’ understanding of the theory. As well as attending classes, the LLN team presented literacy and numeracy strategies in mini-workshops (20 minutes) at Programme Team meetings.

Tutors were encouraged, through brainstorming sessions, to share examples of ideas and good practice. Many tutors were able to apply these new skills by creating new activities appropriate to the literacy ability of their students.

**For additional information**

This guide provides a brief introduction to concepts of language, literacy and numeracy. Academic staff members interested in understanding language, literacy and numeracy to a deeper level should read additional material and information.

**Some relevant resources include:**


References
