

Adult Numeracy Core Curriculum Ideas and Suggestions

Language and numeracy

The language of numeracy and mathematics can not only be challenging for speakers of other languages, but also for those learners whose first language is English. Addressing mathematical language issues can help to allay the anxieties that some learners have about numeracy. Below are some strategies to support the development of numeracy specific language in all learners.

- **Dictionaries.** Encourage learners to keep their own mathematics vocabulary dictionaries and add new words to them on a regular basis. Looking up words in mathematical and ordinary dictionaries (both online or in books) can also be useful, as this enables learners to see other words that use the same root or stem, e.g. millimetre, millennium.
- **Talking maths.** Plan activities which will enable learners to make active use of their target vocabulary. These can include:
 - Investigational tasks which can be done in small groups or pairs.
 - Asking learners to present their results, findings or methods to their peers.
 - Getting learners to make up their own questions for each other to answer.
 - Using open-ended questions containing words such as 'why' or 'how'.
 - Games involving communication such as giving instructions or describing properties of numbers or shapes.
 - Class discussions on selected topics, e.g. the use of percentages in everyday life, the use of measurement in calculating the cost of decorating a room, or what sort of mathematics learners' children are studying in school.
 - Small group/paired tasks such as card matching or sorting, to be followed by comparing results with another group.
 - Evaluating activities with learners and getting them to discuss what they think they have learned.
- **Why it is important to talk maths.** Be explicit with learners about how talking about numeracy can enhance understanding of concepts and methods so that they can see the purpose of the kinds of activities referred to above.
- **New vocabulary.** When introducing new terms (such as *millilitre*, *perimeter*, *approximate*), write them on the board, say them several times and get learners to repeat them out loud, for example, by reading out questions or statements containing the target vocabulary. Create a classroom environment where learners feel confident about trying to pronounce new words in front of their peers, and are able to support each other in this.

- **Sources of error.** Anticipate areas of confusion (e.g. interpreting '2 divided by 4' as '2 into 4' because a whole number answer is automatically expected), and discuss these explicitly with learners. Sometimes it makes for more effective learning to allow learners to make the anticipated 'mistake' first, and then talk about it with them afterwards.
- **Visual aids.** If possible, back up speech with visual aids. For example: a number line on the board, use of Clip Art, pictures or diagrams on handouts and worksheets, sketches on the board of bar charts and pie charts during a discussion on types of chart, or demonstrating with your hands the size of a metre when talking about measuring a room.
- **Literacy and ESOL methods.** Look in the Literacy and ESOL curricula for methods of introducing vocabulary at various levels. The 'word focus' elements in the 'Writing' section of the Literacy curriculum have some useful suggestions, including activities involving categorising or matching key words.
- **Spelling.** Discuss strategies for spelling difficult words with learners, anticipating sources of error ('fourteen' and 'forty') and plan activities which enable them to practise writing these words.
- **Questions.** Encourage questions from learners about what is being learned, and invite other learners to try to answer them, intervening where appropriate.
- **Recapping.** Summarise key vocabulary and phrases used at the end of each lesson or topic (and/or the start of the next lesson).
- **Active vocabulary.** Elicit answers and explanations from learners as much as possible rather than doing the talking yourself. This will encourage them to use the target words and phrases actively rather than only being able to recognise and understand them.

Useful links:

[An article on the NCETM website supporting children to develop mathematical vocabulary.](#) Some of the ideas are applicable to adults too.

Key word factsheets and glossaries are available for a number of different topics on the [BBC Skillswise site](#).