## Adult ESOL Core Curriculum

## ESOL and numeracy

Talk, reading and writing frequently includes elements of numeracy, and has implications for both language (e.g. vocabulary, discourse, grammar and pronunciation) and mathematical concepts. For example, newspaper articles may include percentages, and people talk about halves and quarters of things.

In ESOL classes, avoid making assumptions about what learners know about numeracy. A learner's level of English is not an indicator of their level of numeracy because learners learn to use English through routes that may not include maths/numeracy education. Learners' levels of maths/numeracy may be higher or lower than their levels of English. For example:

- Learner A: Formally educated in school until age of 8, where he/she had some limited formal maths education. Is a fluent English speaker, having learnt English through everyday life in the UK and ESOL classes.
- Learner B: Studied maths as part of a university degree. Did not study English at school and started learning English when came to UK. Is currently in an ESOL class working towards Entry 1.

The assessment processes provide opportunities for ESOL teachers to gather valuable information about learners' numeracy skills, which can be used to inform learning and teaching, including differentiation. ESOL teachers may be able to collaborate with numeracy colleagues to assist this process.

Include elements of numeracy in ESOL programmes that will enable learners to use language (i.e. talk, read and write) relevant to their everyday lives and work and study aspirations, for example: using the 24 hour clock to talk about transport times; describing things in terms of commonly used fractions and percentages in everyday talk, such as a hundred percent, fifty percent, a half, a quarter, a third (where learners are unfamiliar with these concepts, suitable learning activities should be provided).

Monitor resources. Include numeracy elements that are relevant to learners and, where necessary, build in learning activities with suitable differentiation the teacher will need diagnostic information about learners in order to make these types of decisions. For example, activities to familiarise learners with ways of presenting information in tables and graphs, etc. can be provided alongside a reading activity on a written text which includes a table or graph. Avoid elements of numeracy that would create barriers to learning and are not addressed by learning activities; for example, avoid using percentages to explain frequency adverbs (e.g. always $=100 \%$, never $=0 \%$ etc.) if some learners are unfamiliar with percentages and the lesson assumes knowledge.

ESOL Numeracy classes. Where ESOL Numeracy classes are provided, they may be graded for numeracy, or they may be mixed level:

- As a learner's level of English is not an indicator of his/her level of numeracy, careful assessment is needed prior to placing ESOL learners in graded ESOL numeracy classes.
- ESOL Numeracy classes with a wide range of numeracy levels may include learners who have Maths degrees alongside those who have never studied Maths formally, and a range of levels in between. In this type of situation a robust approach to differentiation will be needed to avoid inadvertently teaching learners things they know how to do, for example, teaching a learner who has a maths degree how to subtract. While learners may know and understand the maths, they may need to learn to talk, read and write about it in English (as appropriate). Teachers and learners need to be clear about whether they are working on the language of maths and/or the maths itself. Be aware that numeracy methods differ from country to country and that learners should not be expected to switch from a method that they have used to another method.


## Useful links

For further guidance, see 'Language and numeracy'

