



## **Suggested Programme to accompany Criteria for AMBDA Numeracy**

### **1 A suggested programme of lectures which should take at least 45 hours and is likely to include the following essential elements:**

- a) definitions of dyslexia and how it affects learning;
- b) dyscalculia: definitions and descriptions including essential elements of maths which could be linked to dyscalculia and dyslexia;
- c) underlying factors which cause difficulties for any learners with maths learning problems, including maths anxiety, sequencing problems, spatial awareness etc;
- d) the National Numeracy Strategy, National Curriculum, or their equivalents, and their impact on learners with maths learning problems. Advantages of the National Numeracy Strategy, or equivalent, for learners with dyslexia explored;
- e) mathematical support is secondary maths and beyond, including the design of dyslexia friendly maths lessons;
- f) the developmental strands of maths within the National Numeracy Strategy, or equivalent, and other programmes;
- g) prerequisites to learning theories of maths development (eg Piaget, Bruner, Sharma etc);
- h) the vocabulary and language of maths, how this impacts on the dyslexic learner in particular, including the design of worksheets, evaluation of books, exams etc;
- i) error patterns and marking philosophy;
- j) classroom management and the included learner with maths learning problems;
- k) learning styles, learning personalities and cognitive style and their teaching implications;
- l) ICT and its use in the classroom, including evaluation of programmes which will be accessible to dyslexic learners;
- m) assessment and diagnosis using standard tests including Key Stage Tests; and
- n) teaching methods:
  - (i) the basics: counting, place value, basic facts, the four operations;
  - (ii) positive and negative numbers;
  - (iii) fractions, decimals and percentages;
  - (iv) time;
  - (v) shape and space; and
  - (vi) after numeracy to GCSE.

For all of the above, different methods will be investigated and a range of different concrete materials will be used to develop a battery of resources available to teachers when faced with learners who have different needs.

## **2 At least 35 hours of seminars relating to the lectures, such as:**

- a) development, trial and evaluation of a topic assessment test;
- b) review of two computer programmes for maths;
- c) background reading of set books and papers;
- d) critical analysis of two research papers; and
- e) a 2500 word extended task of a topic relating to the content on the taught modules.

## **3 10 hours of tutorials for support/feedback for the written assignments, the teaching observations and design of the remedial teaching programme.**

The teaching assignment will consist of 2500 words which will show an understanding of the principles of appropriate multisensory teaching. For example:

- a) classroom observation and documentation of two learners to assess their needs followed by development of a targeted programme; and
- b) detailed teaching programme for a learner such that the programme could be delivered by a classroom assistant.

The BDA emphasises the importance of good classroom practice. Therefore, There is an expectation of **a further 30 hours** of individual teaching, at least 20 hours of which shall be with the same learner. At least three hours of teaching and one hour of diagnostic assessment must be observed and assessed by the course tutor, but use of video/audiotaped recording of lessons is permissible.

Teaching will be evaluated by formal and informal means of observation and teaching diaries to monitor learners' progress. The teaching programme should be discussed and approved by the supervisor or tutor and progress should be monitored

Assignments in the form of essays, case study and teaching and assessment reports should form part of the overall assessment and should be made available if required.