Definitions of dyscalculia:

There is no single widely accepted specific definition of dyscalculia, but a number of definitions exist:

American Psychiatric Association (2013)

Developmental Dyscalculia (DD) is a specific learning disorder that is characterised by impairments in learning basic arithmetic facts, processing numerical magnitude and performing accurate and fluent calculations. These difficulties must be quantifiably below what is expected for an individual's chronological age, and must not be caused by poor educational or daily activities or by intellectual impairments.

Kosc (1974) defined developmental dyscalculia as 'a structural disorder of mathematical abilities which has its origin in a genetic or congenital disorder in those parts of the brain that are the anatomical-physiological substrate of the maturation of the mathematical abilities adequate to age, without a simultaneous disorder of general mental functions'. (Kosc, 1974, p165).

The DSM-IV (2000) document, used by educational psychologists, defines mathematics disorder in term of test scores: 'as measured by a standardised test that is given individually, the person's mathematical ability is substantially less than would be expected from the person's age, intelligence and education. This deficiency materially impedes academic achievement or daily living.' (DSM-IV, 2000, 315.1).

There are two key features of this definition: the mathematical level compared to expectation, and the impedance of academic achievement and daily living.

Butterworth (2001) says:'most dyscalculic learners will have cognitive and language abilities in the normal range, and may excel in non-mathematical subjects.' (Butterworth, 2001, http://www.mathematicalbrain.com/int06.html).

The National Numeracy Strategy (DfES, 2001) offers the following definition: 'Dyscalculia is a condition that affects the ability to acquire arithmetical skills. Dyscalculic learners may have difficulty understanding simple number concepts, lack an intuitive grasp of numbers, and have problems learning

number facts and procedures. Even if they produce a correct answer or use a correct method, they may do so mechanically and without confidence.' (DfES, 2001, p2).

Sharma (1997) defines dyscalculia as: 'An inability to conceptualise numbers, number relationships (arithmetical facts) and the outcomes of numerical operations (estimating the answer to numerical problems before actually calculating).' (Sharma, 1997, http://www.dyscalculia.org/experts/sharma-ctlm (Archived by WebCite® at http://www.webcitation.org/5a5tLlpxE)).