Some useful tips about how fluency in reading is attained, directly quoted and adapted from Falzon 2012.

The path to efficient reading starts with reading visually and ends with reading visually.

Adam's (1990) model explains that in reading, the beginning and accomplished readers use a number of processors. **The first** is the orthographic processor since reading involves the use of sight. In any alphabetic written language, the **phonological processor** (second processor) is the link between print and speech and this link allows for more access to print as the link becomes stronger and more automatic. Adam considers **the context as the third processor**: the environment that the print is nested in. During the early phases of reading this context (pictures, other words) is sometimes over relied upon (guesswork). Then, as the reader becomes more skilled, the context is used to interpret the text, deepen and support comprehension. These three processors work together to help lead to **the fourth processor** and the aim of reading: the **semantic processor** which considers all possible meanings and then selects the correct one. The connection of the alphabet (Orthographic information – or tactile in the case of Braille) with the sounds (phonological information) to form the words to access print which are 42 sounds to include clusters. For effective reading to occur, all four processors must work together.

A good linguistic knowledge is necessary as a precursor so that the teacher effectively teaches children to break the code to literacy. This content knowledge includes linguistic knowledge of phonemes, graphemes, syllables, morphemes, sentence structures, parts of speech and orthography rules; also being able to 'hear' the classic pronunciation of the word with its entire word ending. Words like 'environment' often lose their middle consonant/phoneme.

Teaching phonemes without these other skills will lead to phonic dependency which in English is not appropriate for fluent reading to take place. This must happen before one can read for meaning. If children have difficulties with particular modes of processing such as dealing with information presented throughout the auditory channel, this could be compensated for through the use of the visual channel (compensatory channel).

Considerable reinforcement and repetition are necessary due to short- and long-term memory challenges. Memory strategies need to go beyond rote learning as explained below. For children with a specific learning difficulty such as reading, auditory sequential short-term memory challenges have to be taken into consideration and such challenges necessitate the use of strategies beyond simple rote learning. Repetition and over-learning using a multisensory approach are effective strategies: oral (say), visual (see), auditory (hear), kinaesthetic (feel).

However this EP feels Jolly Phonics is a step too far for limited working memories to deal with. Remembering an action is a great game for teaching small children single sounds but cannot be used to learn fluency as the memory is being distracted to recall actions not concentrating on recognising written sentences and sound associations. In other words, the use of auditory, visual, kinaesthetic and cognitive mnemonics is very important in the teaching of reading and spelling - e.g.: (a) B*EAU*TIFUL – (*E*lephants *A*re *U*gly); (b) "ight" I might fight the bright light and then have a slight fright during the flight; (c) rule Learning -.1-1-1 rule; "i" before "e" rule; soft and hard /c/ and /g/ sounds) (Barton 1999; Hickey (1977/2001); Miles 1997; Traub & Bloom, 2000; Wilson, 1996).

In learning, and particularly in literacy teaching, the use of all senses is referred to as VAKT (Visual-Auditory-Kinaesthetic-Tactile) and includes tracing, listening, writing and seeing (Fernald, 1943). For example, learners hear the words/sounds as they are pronounced, see the word/letter/s symbols, and are also given the opportunity to increase tactile and kinaesthetic stimulation through the use of tactile resources such as sandpaper letters, plastic or wooden letters, finger painting, sand trays and raised or sunken letters.

A programme which is sequential and cumulative is necessary for children with difficulties to master sub-skills before moving to more advanced material and should place sufficient importance and attention on phonological and phonemic awareness. The sequence must begin with the easiest and most basic elements and progress sequentially and methodically to more difficult material. Each step must also be based on material already learned and concepts taught must be systematically reviewed to strengthen memory (Moats, 1999). As such, trained instructors must teach in a logical and cumulative order and must utilise both synthetic and analytical literacy instruction. In other words, present the parts of the language and teach how the parts work together to form a whole and vice versa (Aaron et.al. 2008).

Explicit linguistic knowledge of basic language constructs is intrinsic to the learning process and should be taught in a direct systematic manner. Such knowledge includes phonological and phonemic awareness, sound-symbol association, the alphabetic principle, phonics, syllable knowledge and use, and morphology (Moats, 1994; NICHD, 2000). This is necessary for developing accurate, automatic word recognition needed to glean meaning from printed texts through fluent effortless reading. Moats (2007) reports that poor readers often "know simple letter-sound correspondence, but do not know how to divide a multi-syllabled word into its essential sounds. To do this, students must recognise base words and endings, roots and affixes, compounds and contractions". In other words have a linguistic knowledge base.

Phonological awareness is the understanding of the internal linguistic structure of words. It includes the ability to understand that language is made up of words, words of syllables (phonological awareness); and syllables of phonemes (phonemic awareness). When addressing phonology, learners are taught sounds and how these work within their environment (speech words in words). This would involve addressing the skills of identifying and manipulating compound words (bedroom - bed room), identifying and separating syllables in words (ta-ble; car-pet) recognising and generating rhyming words (hut, cut,) and differentiating phonemes (mat - /m/ /a/ /t/). Learning then progresses from phonological awareness to eventually presenting and guiding towards phonemes - the smallest unit of sound in a given language that can be recognised as being distinct from other sounds in the language (Moats, 2007).

Phonemic awareness, which is a sub-skill of phonological awareness, is an important and fundamental aspect which involves the ability to segment words into their component sounds. This then forms the basis on which the ability to decode words is based such that this skill, when mastered, is then paired up with the "eventual association of the written letters of the alphabet with their sounds" (Aaron et al.). Beginning and struggling readers may need auditory-verbal instruction, perhaps with the support of non-verbal input (pictures) to help memory, and without the use of letters, if they have difficulty distinguishing between sounds or recognising and producing sounds from words (Moats 1994, 2007, 2009).

Sound-symbol association is the knowledge of the various sounds of the language (phonemes) and their correspondence to the letters and combinations of letters (graphemes) which represent these phonemes. This involves the ability to *verbal-visually* perceive perceptual difference automatically and quickly (Aaron et al. 2008). *Verbal Visual Discrimination* is important because the readers need to distinguish very similar line drawing such as "t","h","k", "ph", and "m", "n", "u", "pl" when reading. Such discrimination is important to arrive at the appropriate lexical meaning. Discrimination of similar looking letters is the basic element of the written language, and perception of form needs to be exact for successful reading. Furthermore this then has to be automatically linked to the sound of each grapheme.

Sound-symbol association must be taught (and mastered) in two directions: visual to auditory (reading - recalling a phoneme from a given verbal visual symbol) and auditory to visual (writing - recalling and producing graphemes from a given sound). Furthermore, young people must master the blending of sounds and letters into words as well as the segmenting of whole words into the individual sounds. These skills need to be mastered automatically with the ability to process them simultaneously. Decoding requires the fusion of two skills - blending the words together with translating visual symbols into sounds (Moats, 1999; Hornsby, 1995; Wilson, 1996).

Phonemic processing is not the same as phonic processing but "confusion between them is pervasive" (Moats, 2007) in programmes meant for teaching beginning readers. Teaching phonics is more than most people (including many phonics advocates) realise, and not just simple connections between letters and sounds. Teachers should be wary of programmes which end phonics instruction before

longer more complex words are tackled and Moats explains that phonics must include linguistic word analysis. Phonemic and phonological awareness, as explained above, focus on the features of speech sounds and spoken words (without the use of printed letters or words) and must precede "tying those sounds to letters, as phonics does" (Moats, 2007). Phonics is the ability to use phonemic awareness as you are working with the printed text. In order to recognise printed words, young people need to not only learn the connections between phonemes and graphemes but also understand the spelling patterns for syllables in order to cope with longer more complex words.

A syllable is a unit of oral or written language which includes one vowel sound (Aaron et al., 2008). In a context where any syllable in the English language includes only one vowel sound, linguistic knowledge of syllables is essential. Syllable instruction should be taught in a structured and sequential manner and in English, specifically addresses the teaching of the six basic types of syllables where syllable division rules should be taught in relation to the word structure (Moats & Tolman, 2009). (See table at the end) Without a strategy for chunking longer words into manageable parts, beginning and/or struggling literacy learners may look at a longer word and simply resort to guessing, or ignoring. Knowledge of syllable-spelling helps readers know not only whether a vowel in a word is short (eg. Cab - closed syllable) or long (e.g. cable – open syllable), but the familiarity with the six syllable patterns helps students read longer words more accurately, more easily and more fluently, as well as have more skills to solve spelling problems.

A morpheme is the smallest unit of meaning in a word and morphology studies word structures and how words are formed from morphemes and how morphemes are combined from words. Morphemes may be as short as one letter (e.g. the plural "s") or a combination of letters that contain meaning (e.g. suffixes -ful, -ly, -ness,-tion; prefixes mis-, un-, dis-). These units of meaning could be base words, roots and affixes, prefixes and suffixes. Morphemes are usually classified into free and bound morphemes. Free morphemes occur as separate words (e.g. cat; you) and bound morphemes cannot stand alone as words (e.g. "-s", "un-"), (Aaron et al., 2008; Azzopardi, 2007; Cassar 2002).

Students who understand words at the morphemic level are better able to get the meaning of words and better prepared to deal with reading and writing, as the literacy content increases in quantity and quality. Effective readers use morphological knowledge to recognise complex words. Learning morphemes helps young people be better equipped to address unfamiliar words and morphologically complex words. Young people with morphological knowledge are better able to separate out the morphemes into meaningful units for use in decoding, comprehending as well as in spelling tasks. This is again taught within a structured and sequential programme (Moats, 2007).

Taylor, Pearson, Clark and Walpole (1999) identify specific practices conducive to the use of these techniques for successful literacy at the classroom level. Apart from a **stress on literature as an enjoyable activity**, they include a need for systematic **word recognition instruction**, repeated reading to develop fluency in reading, guided writing activities, one-to-one reading support, continuous assessment of pupil progress, and daily small group instruction sessions of not more than 20 minutes.

Rose (2006) supports the concept that one needs to go beyond mere phonics. He points outs that the mere use of phonics, which has been in place and part of the British National Curriculum since 1989, in and of itself had little impact in improving reading and writing skills. What was, in his opinion, effective was the introduction of structure - the National Literacy Strategy's (NLS) introduction of the Literacy Hour in schools (Education and Skills Committee, 2005). The NLS started operating in 1998 and at the time only 65% of British 11-year olds had reached the required target in English. By 2005, after seven years - in other words a whole cohort of students from Reception to Year 6, using the literacy hour technique, Rose (2006) reports that the percentage had increased to 80%.

Six Syllable Types (Moats, & Tolman, 2009; - Table 5.1. Summary of Six Types of Syllables in English Orthography, ttp://www.readingrockets.org/article/28653/)

Table of syllable types from Falzon 2012

Syllable Type	Examples	Definition
Closed	dap-ple hos-tel bev-er-age	A syllable with a short vowel, spelled with a single vowel letter ending in one or more consonants.
Vowel-Consonant-e (VCe)	com-pete des-pite	A syllable with a long vowel, spelled with one vowel + one consonant + silent e.
Open	pro-gramme ta-ble	A syllable that ends with a long vowel sound, spelled with a single vowel letter.
Vowel Team (including diphthongs)	aw-ful train-er con-geal spoil-age	Syllables with long or short vowel spellings that use two to four letters to spell the vowel. Diphthongs ou/ow and oi/oy are included in this category.
Vowel-r (r-controlled)	in-jur-i-ous con-sort char-ter	A syllable with er, ir, or, ar, or ur. Vowel pronunciation often changes before /r/.
Consonant-le (C-le)	drib-ble bea-gle lit-tle	An unaccented final syllable that contains a consonant before /l/, followed by a silent e.
Leftovers: Odd and Schwa syllables	dam-age act-ive na-tion	Usually final, unaccented syllables with odd spellings.

I hope this is a useful insight. These words were found by Warwick University to make up 53% of all English written text. The first 16 make up 25% of all text of practically every page. We need to think about our own list for Maltese use. Therefore if English readers learn these they can feel quite confident when reading. At least Maltese is phonically regular so identifying all the phonemes is pretty easy. (We have 481 which this program reduces to the commonest 61)

ERR Sight Words

First 16

a	the	I	in
was	to	and	it
my	that	he	went
of	is	then	with

17 - 40

am	had	me	some
are	has	one	there
at	have	out	they
come	her	saw	this
for	his	see	we
go	little	she	when

41 - 100

about	could	make	after	did	take
new	their	all	next	do	them
an	down	not	three	as	from
now	time	away	get	off	today
back	got	old	too	be	here
on	two	because	him	once	up
big	into	other	us	but	last
our	very	by	like	over	were
call	live	put	what	came	look
said	will	can	made	so	you