Why Montessori Children Can Read and How They Do It
By Louise M Livingston

Introduction
Montessori teachers are convinced of the sense of their approach to the teaching of reading because they have witnessed for themselves so many children learning to read with seemingly little effort. More recently, it has also been possible to quote Dr Lillard’s now renowned work published in Science,¹ which suggests that Montessori children are better readers. In addition, reading assessment results from schools all over the world bear testament to the success of the Montessori approach to reading.² None of these reports make clear why the approach works. However, since Montessori is developmental education it is likely that the success of the reading programme can be attributed to the fact that the approach taken to reading is developmental rather than instructional.

With this in mind this paper addresses the extent to which the Montessori approach draws on the process by which mankind has developed the capacity to read and, in particular, how this is mirrored in the young child. It also looks at how the Montessori approach is validated by current research on what children need in order to become skilful readers.

¹ Lillard, A and Else-Quest, N [2006] Evaluating Montessori Education Science 29 313. no. 5795, p1893
² One example: www.pinewoodsmontessori.com/outcomes
1. Montessori and the Development of the Reading Brain

'The Story and Science of the Reading Brain,' 'The Science of Reading,' 'A Scientific Revolution in Reading'

A scan of the strap lines of books that claim to tell us all we ever needed to know about the teaching of reading reveals one thing to us – that the teaching of reading has finally become a science rather than an art. This tells us that we can study it just like we have studied the science of carbons or the science of plants. Of course, this also tells us that we can measure what works and what doesn’t and make deductions from this with regard to the best approach to take. But more importantly it tells us that, if reading is a science, it must be related in some way to other biological systems. In particular, since the ability to read is human, it should recruit the physiology of the human being to be successful. That is not to say that every human being learns to read just like he learns to talk or walk – of course he has to be given some keys that will encourage this skill to develop and we know that, sadly, when this is not done properly human beings do not learn to read at all.

So what is the link between the ability to read and the physiology of the human being? It has its roots in the way that humans first created a way of expressing their thoughts in written form. When the Greeks created an alphabet they came up with a way of representing every sound that they could make when they were speaking. In order to do this it seems logical that they drew on the mechanisms that the existing structures of the brain offered and when they came to reading what had been written by others they would draw on these very same structures. So that, over time, as the writing system developed and was refined, so the structures of the brain reorganised themselves to make themselves available for use in the process of reading. It seems obvious then that in teaching children to read we should also find a way to draw on these very same structures. If we teach children symbols for each of the speech sounds that they already know they can write whatever they want to say, just as the Greeks did. Through this act of writing they will become familiar with the alphabetic principle. This would seem to be the most logical approach as history tells us this is a route that the human mind has naturally chosen to take. However, many literacy experts do not seem to have understood this logic and most phonetic reading programmes start with the letter and teach its sound. As Louisa Moats, one enlightened literacy expert, says:

‘One of the most fundamental flaws found in almost all phonics programmes, including traditional ones, is that they teach the code backwards, That is, they go from letter to sound instead of from sound to letter. Such programmes disregard the fact that speech evolved at least 30,000 years before writing. Alphabetic writing was invented to represent speech: speech was not learned from reading. Following the logic of history we should teach awareness of the sound system [phonology] and anchor letters to it.’

This is precisely the path taken in the Montessori approach. The children start with what is already known to them, that is, their own spoken language and then are given symbols to represent the sounds. As psychologist, Diane McGuinness points out:

‘It is the sounds in speech that are real, consistent and stable. The letters are the code. ....If you tell [the child] that letters on the page stand for specific sounds in her own speech the process of matching letters to sounds will make sense.’

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If they are to be given a way to represent every sound that they use when they are speaking, in a language that is not phonetic they must also be given digraphs, not just the single letters of the alphabet. To start with they are only need to be given one way of representing each sound. For example, ‘ai’ is given to represent the vowel sound in ‘cake’, ‘pail’ and ‘play’. As Montessori says, in this way the child is given a simple written representation for the sounds he knows:

‘The correct use of the alphabet in learning to write should only give the simple signs of the alphabet itself in order to put them in direct relation to the sounds they represent.’

Following along the path that history has taken, the child can then use these symbols to write his thoughts down and in this way familiarity of the relationship between sounds and letters and the way that the written word is created develops.
2. Through Writing to Reading

The ability to transcribe thoughts into written words is seen as an important step in the process of learning to read. As Adams says:

‘In a classic study of children who learned to read well before entering school, it was observed that, for many of these children, writing came first. Indeed, the ability to read seemed almost like a by-product of the ability to print and spell.’

The simplicity of giving one grapheme to represent each sound allows the child to master the first difficulty – that is, the understanding of a basic phonetic code - without the confusions that can be thrown up by the many variations that occur in the way in which English is spelt.

In order to be able to do this the child needs only two key pieces of knowledge: He needs to know how to break down the words that he wants to write into their component sounds and he needs to know the symbol that represents each of these sounds. In a Montessori environment the first is done by playing Sound Games and the second is given with the Sandpaper Letters. Then with these two key pieces of knowledge the child can write any word he chooses to write with the use of an alphabet of wooden letters. He composes words by choosing the letters and placing them next to each other to form words. As he does this he has to vocalise the sounds in the word and choose the corresponding symbols. This encourages him to make an intense study of the sounds and their symbols and the way in which the words are formed just as he did when as a small baby he made sounds and then put them together to make words. In doing so he is able to draw on innate developmental powers. As Maria Montessori says:

‘…. the little child in the first steps of our method was to establish the psycho-motor mechanism of the written word by a slow process of maturation such as takes place in the natural growth of articulate speech; in other words by exercising the psycho-motor paths.’

How well these words, first published in 1916, reflect the recommendations of today’s neuroscientists who talk about the logic and advantages of facilitating reading through the child’s expression of his own language by sounding out and writing words using his knowledge of a simple phonetic code and a tool such as letter tiles. The use of speech helps him to memorise the link between the sounds and the letters. As Jeanine Herron says:

‘The reader segments phonemes primarily by using the motor system of speech, with its superior capability for sequencing and memory’

Montessori seemed to intuitively understand what scientists now know to be true, that is, that the pronunciation of the sounds as the child searches for the letters in the Moveable Alphabet help with the memorisation of both the letters and the sequence that forms the words.

As children grasp the idea that the sounds of the spoken language can be represented by symbols that can be used to write words they explode spontaneously into writing – they are no longer in need of the teachers help to write because they have been given the secret code that will allow them to write any word they choose. When teachers in a traditional classroom worry about how they will tend to each

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6 Adams, M.J. Beginning to Read. The new phonics in context. A precis of the classic text. p95 Heinemann Educational, Oxford
children’s individual needs they have no need to worry - if they teach the basic phonetic code and allow the children the freedom to write they will no longer need the teacher. This explosion is also facilitated by the fact that children are not having to write the letters with their own hands. This requires an effort of coordination between the hand and the mind and because of this it can take a considerable amount of the child’s mental and physical energy. But when the child is given preformed letters with which to write his mind is set free. As Montessori says:

‘It entails an exercise of the intellect freed from mechanical activities and is not held down by the need to imitate letters in writing. The intellectual energy employed in this new interest can therefore be expended without weariness on a surprising amount of work.’

The exploration of the phonetic code that is facilitated when the child writes is thought by experts to be a significant step in the development of the child’s ability to read.

‘Dealing successfully with written language as a writer or reader – the task of literacy – requires automatic skill with the alphabetic code. Practice with encoding enhances facility with decoding; they are two halves of the same learning task.’

In the Montessori approach this link between writing and reading is first introduced with the Sandpaper Letters since the child is both reading and writing at the same time:

‘When a letter is given to a child and its sound pronounced, the child fixes an image of it in his mind with the help of his visual and his tactile-muscular senses. And he definitely associates the sound with the relative symbol, that is, he becomes acquainted with written language. When he sees and recognises, he reads; when he touches he writes. That is, he begins to become acquainted with two acts which in the course of time develop, separate, and thus constitute the two different processes of reading and writing.’

This link is then further extended as the children are given opportunities to write freely on a Moveable Alphabet. After considerable experience breaking down the sounds in words and choosing letters to represent these sounds they start to do the reverse process which is to synthesise these letters and their corresponding sounds to make words that they read. They start to link the activities of writing and reading. As Montessori says:

‘almost all normal children who have been trained according to our methods begin to write at four, and at five they can read and write as well as children who have finished first grade.’

The Montessori approach is not only a synthetic phonic approach as is recommended both by the Rose Report and the Reading Reform Foundation but it is unique in that the particular synthetic approach being used is one which uses the sounds of the language rather than the letters as a starting point and this is considered by reading experts to be the most successful method since it is teaching the alphabetic principle the right way round.

14 http://www.standards.dcsf.gov.uk/phonics/rosereview/p19
15 Chew, J [2006] A response by the Reading Reform Foundation to Jim Rose’s Final Report Reform Foundation Newsletter, 58
Originally Montessori prepared these letters for use by the primary school aged children, those of six and seven years old. She didn’t think that the four year olds would be interested in what was considered to be the higher intellectual activity of writing. But to her surprise she found that it was the four year olds who took up the letters and wrote with such enthusiasm:

‘Children showed a great interest in the spoken language which they already possessed and sought to analyse it. They were seen walking by themselves and murmuring something or other. One kept saying: ‘To make Zaira, you must have z-a-i-r-a’ and he kept pronouncing the sounds that made it up. He seemed to be making a kind of discovery: The words we pronounce are made up of sounds. This type of activity can be aroused in all children at about the age of four.’

Her observations of the children’s response prompted her to make this kind of activity available to children as young as four. Today neuroscience prompts us to do the same. For if we know that organisation of the structures of the brain is essential to the ability to read then activity of this type must be given to the child at the time when he is most able to make this organisation of his brain – that is whilst he is under the age of six.

As Jeannine Herron tells us

‘…for most children, their first experience with letters and words dictate how the brain establishes neural networks that may become habitual pathways as reading develops’

She goes on to say:

‘.students gradually build up a repertoire of the 40 letters and digraphs that represent the basic phonemes in English. Neural networks for these 40 paired associations will thus be laid down consistently’

Montessori explains that the reason for this ‘keen interest in analysing words… or delight in seeing them translated into letters placed in a row’ is the fact that the child is in the process of forming his language at this time. He has what she called a Sensitive Period for Language at this time so he is particularly drawn to activities that help him in forming his language. If we leave this activity until later – say six or seven years of age, as some suggest, then the child is no longer interested in the same way. He can still do it of course - many of us did not learn to write or read until we were at least six - but not with the same joy and facility as during this special time when language is acquired and perfected with ease. Because the approach mirrors the way in which he has developed his own means of spoken expression, he is able to call upon the processes that already exist within him. In the first three years of life he uses these processes unconsciously to create spoken language, in the second three years of life he can use these very same processes in the conscious creation of written language. In this way he also becomes conscious of his own spoken language and this helps him to perfect this.

‘The signs of the alphabet, as we give them, embodied in separate objects which can be handled, act not only as stimuli drawing the activity of the consciousness towards the articulate language which had first been acquired unconsciously, and leading to an analysis of the sounds composing words, but they also give to these sounds a

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Primary Training Programme: Second Tier Why Montessori Children Can Read and How They Do It by Louise M Livingston
visible shape which remains all the time before the eyes.’

The role of the Moveable Alphabet in helping to correct the child’s pronunciation cannot be underestimated. So often when a child starts to read he stumbles over the pronunciation of words and all of his efforts have to be focused on the mechanics of pronunciation. For the six year old the perfection of pronunciation is so much harder than it is for the child of four who is still in the Sensitive Period for Language and whose neural pathways for speech are still being connected. At four the perfection of pronunciation is a natural process which happens without conscious effort, whereas at six the child has to apply his mind consciously to controlling the muscles of his tongue, mouth and throat and this effort leaves no room for his brain to work on understanding the meaning of the words he is trying to read. As Montessori says, it ‘prevent[s] the development of the high intellectual activity which interprets the mysterious language of written symbols and arouses the child’s enthusiasm with the fascinating revelations they can give. The eagerness of the child to learn is curbed and cheated when he is compelled to stop his mind from working because his tongue refuses to act properly and must be laboriously trained to work right. This training, if begun at the proper time, when the child’s whole psychic and nervous organism yearns for the perfection of the mechanism of speech, would have been a fascinating task; and once started along the right path, the pupil would have continued to follow it with alacrity and confidence. When the time comes for the intelligence to try its wings, its wings should be ready.’

Maria Montessori described these children who exploded into writing in the first Children’s Houses as ‘ravenous in their desire to master the written language.’ Could we really say this of all the children in traditional schools sitting through their daily literacy hour? Is this the way the teachers describe the children they teach to read? Maria Montessori suggests that this enthusiasm can be attributed to the fact that her method pays attention to the timetable for the natural development of language in children and is therefore able to take advantage of the child’s own innate powers for language development. It seems that it is essential that we choose the right moment. She warns that if we leave it too late we risk losing the opportunity to take advantage of the child’s natural interest and if it is true that, ‘if, indeed, so-called compulsory education begins with illiterate children of six years of age, they meet with great difficulties, because at that period of life it is a waste of time and energy to learn writing and reading, and this imposes on children an arid mental effort which breeds a certain disgust towards study and all intellectual instruction.’

3. Sandpaper Letters and the Sound Games - The Gateway to Reading

There are two key activities that have helped the child arrive at the ability to write on the Moveable Alphabet. That is, the ability to break down the words that he wants to write into their component sounds and the ability to recognise the symbols that represent these sounds. The first of these is given through the Sound Games and the second of these is introduced with the Sandpaper Letters.

From the minute that the children come into the Montessori Children's House they are helped to become aware of the sounds in the language that they already speak through playing Sound Games. As Maria Montessori says ‘the learning of writing ought to begin with an analysis of the sounds of the words.’ At first they are made aware of the first, then the last sound in a word and the sounds in between until finally they are able to break words down into all their component sounds. This is done with small groups of children so that each child can work specifically at the level that he needs to work on, but may also be exposed to other levels because of the needs of the others in the group. The mixed age range of the Montessori environment also ensures that individual knowledge can easily become shared knowledge. These days the development of phoneme awareness as it is now called is seen as an essential step in the teaching of reading. The child does not naturally hear the individual sounds so he needs to be made aware of them. It is an essential economy of effort that, as the child begins to speak fluently, he looses the ability to articulate the different sounds of his language, which were such an essential part of his oral language development. As the psychologist, Diane McGuinness says:

‘Many children can’t hear the units of the sounds the letters of the code stand for, and if nobody teaches them these sounds they won’t have a clue what the code is about. This means that many children can’t learn the code. It’s just that simple. The whole language claim that all children will automatically be sensitive to the phonological units of speech simply because they can talk is an erroneous and dangerous assumption.’

The ability to understand that speech is made up of sounds that can be blended together to form words is a good predictor of later reading ability. The neuroscientist, Maryanne Wolf has even described it as a ‘critical component’. However, phonemic awareness alone is not sufficient to ensure reading success. It needs to be combined with the ability to assign the sounds to symbols in the form of letters. When a child can hear these separate sounds in words and articulate them he can be taught how to represent them using letters.

Current thinking suggests that the best way to teach children letters is to take a multi-sensory route. This is an idea that has only really emerged in the last few years in commercial phonics programmes. It is a feature of the popular Jolly Phonics programme and is also a recommendation of the Rose Report, the government commissioned review of reading practice in the UK:

‘Multi-sensory activities featured strongly in high quality phonics work and often encompassed variously simultaneous visual, auditory and kinaesthetic activities

References:

25 Byrne, B and Fielding-Barnsley, R [1989] Phonemic Awareness and letter knowledge in the child’s acquisition of the alphabetic principle. Journal of Educational Psychology 81, p313
28 Adams, M.J. Beginning to Read. The new phonics in context. A precis of the classic text. p54 Heinemann Educational, Oxford
29 www.jollylearning.co.uk
involving, for example, physical movement to copy letter shapes and sounds."  

However, it is the approach that has been taken in Montessori schools for a hundred years. The Sandpaper Letters offer the child an opportunity to take impressions of the letters through several different sensory routes. When he sees the sandpaper in relief against the painted board he gets a visual impression of the shape. When he feels the sandpaper he gets an impression of the way in which the letter is formed through a tactile route and his muscles are encouraged to move in the same way that they will need to move in order to write the letter. At the same time he gets an auditory input when the teacher says the sound associated with the letter. Interestingly enough, because he is also encouraged to say it for himself this vocalisation activates the part of his brain that neuroscientists now tell us is helpful for memorisation. Maria Montessori suggested that the feeling of the letters was particularly important because of the direct effect that this movement had in developing the muscular memory. When children look but do not have any hands-on contact this link is missing.

'When a teacher has a child see and touch the letters of the alphabet, three sensations come into play simultaneously: sight, touch and kinaesthetic [muscular] sensation. This is why the image of the graphic symbol is fixed in the mind much more quickly than when it is acquired through sight in the ordinary methods.'

Diane McGuinness also agrees with the thoughts of Montessori. As she says

'copying letters helps you see them…. the movement of the hand, the sound of the voice, trains the eye where to look. The sound of the voice, the place where you look trains the hand where to move... skywriting or writing letter forms in the air doesn’t work. To create cross-modal connections like the ones I’m talking about, two or more modes must be connected: writing is movement made visible.'

Observations such as these also have an implication for the age at which we offer these kind of activities to the children. If we ask a six or seven year old to feel and write letters in order to learn them we will not get as enthusiastic a response as we get when we ask a four year old to do this. The six year old is no longer interested in feeling since he is past the stage in his life when he needs to explore everything by touching it. His preference is to learn using his intellect. Moreover, he is also past that time in life when his hand is flexible enough for him to be able to coordinate his movements with ease and pleasure. On the other hand, when a four year old feels the letters he learns them with ease because his movements a are still being established and the recognition and writing of the letters is done as part of his natural development. Montessori advises:

'It is necessary to find out at what age the mechanisms for writing are ready to be fixed, they will then be fixed naturally and without effort; and they will also be a source of pleasure and provide an increase of vital energy.'

These days there is much discussion about the order in which the letters should be taught. Some suggest it is important to start with letters that form a large number of simple three letter words whilst others say it is important to consider how difficult the letter is to say or write. Montessori placed little emphasis on either of these. She did not think the order of teaching the letters was important.

30 http://www.standards.dcsf.gov.uk/phonics/rosereview/
‘I have not found it practical to follow any special rule in teaching the consonants. Very often a child’s curiosity about a graphic symbol leads to a teaching of the consonant he desires. The sound of a name may arouse the interest of a child in knowing the consonants necessary to form it. And this desire of a child is a more efficacious means for deciding the order to be followed than any kind of reasoning.’

When teaching the letters with the Sandpaper Letters the Montessori teacher will usually introduce three letters at a time. She will choose letters that are contrasting in shape and sound because children are able to distinguish things that are contrasting more easily than if they are similar and so this is a help to the learning of the letters. The ability to recognise and discriminate shape is also developed in children prior to these activities by the use of a Geometry Cabinet, in which they are shown how to feel around wooden shapes that represent all the key geometric shapes. It is likely that this is a particularly helpful preparation for reading because, as we know, the areas of the brain specialised in recognising shapes are well developed in expert readers. The feeling of the shapes also prepares the child’s hand to be flexible enough to feel the shapes of the Sandpaper Letters accurately. The Montessori teacher also takes great care in the pronunciation of the sounds so as to help the child make the distinctions for himself. She will take care, for example, not to accompany the consonant sounds by a vowel – that is, she will say ‘mmm’ rather than ‘mer’ for the letter M. An understanding of phonics is an important aspect of any Montessori teacher training course. This does not appear to be the case in traditional teacher training where little attention is paid to this aspect of teaching reading, the assumption being that the student teachers already understand phonics. But the reality is that since many of them were never taught to read this way themselves they are not likely to have a sound knowledge of phonics.

When the teacher has judged the right moment to give the Sandpaper Letters to the child and the digraphs are mixed in with the single letters the child can learn all forty in a short period of time. The child who is ready for this challenge will soak up the letters with total ease. In traditional schools the teaching of the letters seems to present such a big challenge to the teachers who become weighed down by the responsibility of having to get through all the letters. But in a Montessori environment this problem does not seem to present itself in spite of the fact that all the lessons given are individual. This is due in great part to the fact that the environment is mixed in age and the children are encouraged to play games with the Sandpaper Letters and to teach each other. The rapid accumulation of knowledge of the letters is considered to be an essential part of good practice and is recommended by both the Reading Reform Foundation and the Rose Report. As the neuroscientist Jeanine Herron says:

‘It doesn’t take long for most children to master the 40 phonemes and their corresponding graphemes. If a teacher introduces three or four phonemes each week at the beginning of first grade, the entire 40 can be covered by Christmas’

In a Montessori environment the teaching of the letter names is also left until much later as these are not related in any way to the ability to read. In order to know what sound a letter makes it is not at all necessary to know its name. Over the years it has been suggested that children need to know both letter name and sound and this is in fact suggested in the UK government’s phonic programme, Letters and Sounds.

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37 Chew, J. [2001] ‘Is the phonics element of the NLS synthetic or analytic?’ Reading Reform Foundation Newsletter, no.45 (February).
38 http://www.standards.dcsf.gov.uk/phonics/roseresearch/
40 http://nationalstrategies.standards.dcsf.gov.uk/node/84969
but neuroscientists say that this is only confusing for the child who starts to confuse letter names and sounds when reading and writing.

Herron says

‘The only characteristic of a letter that it relevant to reading or writing is its sound. We should refer to letters more frequently by their sounds than by their names. The most frequent spelling error in first grade is the confusion of the name of the letter with its sound, such as ‘rm’ for arm and nhr for ‘nature’’.

However, phonemic awareness and the knowledge that these sounds are represented by letters can only be productive if there is an additional awareness that words are made up of letters and that text is made of words. As Adams says

‘basic knowledge about print generally appears to serve as the foundation upon which orthographic and phonological skills are built.’

An awareness of print is built in the Montessori environment through the reading of books. Books are freely available to the children in a ‘book corner’ which they can choose to use whenever they want to. When the teacher reads a book to the children she will show them the cover, read and point out the title, the author’s name and the name of the person who has illustrated it. She will read the book and show the words and the illustrations so that the children start to get an impression that what is printed on the pages can be translated into speech by reading. The idea that letters form words that are written from left to write is also reinforced as the children write on the Moveable Alphabet. The seeds for this understanding have been sewn from the first days in the Children’s House. When a child polishes a mirror or scrubs a table he moves his hand from left to right, when he feels the strips of the Touch Boards he moves his hand from left to right and when he lays out Classified Cards he is encouraged to do this from left to right.

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42 Adams, M.J. Beginning to Read. The new phonics in context. A precis of the classic text. p61 Heinemann Educational, Oxford
4. A Key to Exploration of the Phonetic Code of the English Language

When the child starts to read back the words he has written on the Moveable Alphabet he needs to be given opportunities to read. He can be given words to read that are made up of the symbols that he has already used in his writing. In the Object Boxes he is given labels to read which match the objects in the boxes. We call these phonetic because all of the words follow the phonetic code that the child has been given – so there might be words like ‘hat’ or even words with digraphs like ‘brush’ or ‘toast’ where the child knows what sound ‘sh’ and ‘oa’ make just as surely as he knows the sound that ‘h’ makes because he has learnt them all at the same time. As well as teaching the phonetic code the Rose Report also suggests that a small number of sight words should be taught in the initial stages of reading to help kick-start the reading process. However, it is important that the number of these words is limited so as not to encourage the idea that reading is a matter of memorising whole words or even guessing. If we suggest to the brain that the way to read is to memorise words then it will attempt to create the pathways needed to do this and this sets up the child for failure as it is impossible to be able to memorise the number of words that would be required to read more than a simple text. As Diane McGuinness warns:

‘...no reading method should ever teach children to read whole words, syllables, or syllabic parts like ‘rimes.’ These are the wrong sensory units for our writing system. These incorrect sensory units will be stored in the memory, programming the brain, becoming more automatic with time, and making it harder to learn to read correctly.’

She goes on to say

‘teach only ‘real’ sight words, words that are undecodable, and teach them in the context of reading stories.’

Montessori suggested that a small number of non-phonetic ‘sight words’ could be taught to the child and that when these are taught they must always be given context by giving the child a sentence in which they might appear. We call these Puzzle Words because they do not obey the phonetic code that the child knows and therefore cannot be sounded out. Just a few of these words are taught and they tend to be the high frequency words that just serve to get the child started.

Of course there are many words in the English language that fall into the category of non-phonetic and children need a way to be able to read these. So, if we are not to fall into the trap of expecting the child to memorise them what does the Montessori approach suggest for these? In fact, although they may not be phonetic, examination of these words shows that in most cases patterns can be found. For example, the child may know the sound for ‘ai’ but this same sound can be written as ‘ay’ in words such as ‘play’, ‘stay’, ‘way’ and many more. So if we tell the child that ‘ai’ may also be written as ‘ay’ then this will give him a key to reading many other words. Because the human being naturally seeks to classify all new discoveries he will be able to classify new spelling patterns that he comes across according to this system and this will act as an aid to his reading since it relies on his natural developmental powers, that is, the power to classify new information and in particular to recognise patterns. This provokes an interest in the child.

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43 http://www.standards.dcsf.gov.uk/phonics/roserview/
The only thing really necessary is a proper classification of the words so that a child's interest is aroused in the difficulties, which are illustrated by the way in which the words are grouped. This creates a pure interest in reading words just as it is found in phonetic languages.' 46

Or as Diane McGuinness says:

‘...young children are concrete thinkers and actively categorising everything. They think that everything can be and should be classified’ 47

The development of the child's reading brain will then continue along lines that will be helpful to him since the child can call on the parts of the brain that deal with the organisation of information into patterns and this is a much more helpful approach than reliance on pure memorisation of whole words. In the Montessori approach the materials for giving these keys are called **Reading Folders** and they were developed in the UK by Muriel Dwyer 48 at the Maria Montessori Training Organisation in London [now known as the Maria Montessori Institute]. The **Reading Folders** consist of a set of folders in which the child can explore the different ways in which a key sound that he is already familiar with is spelt. So, for example, he is given the key sound ‘ee’ which he has already learnt by feeling the **Sandpaper Letter** ‘ee’ and learns that it can also be spelt ‘y’, ‘ea’ and ‘ei’ by reading lists of words with these particular spellings of the key sound.

When a child is given a key to the English spelling code such as is given in the **Reading Folders** it becomes clear that the number of sight words that actually have to be taught are very few.

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48 Dwyer, M.I. A Path for the Exploration of Any Language Leading to Writing and Reading Published by Montessori Society AMI UK
5. Reading Reflects the Development of Oral Language

Once the child has mastered the ability to read what he needs is practice but there has been much discussion over the years about what constitutes a suitable form of practice for the child. Current thinking, however, suggests that reading materials should be offered that support the level that the child has achieved. This would seem quite obvious but over the years this kind of wisdom has been largely ignored. It is common to offer books to read as soon as possible. Suggestions have ranged from the use of such wholly inappropriate material as the bible to books specially written with stories appropriate to the children’s level of understanding and put together from words that the children are known to be able to read resulting in a text that does not reflect natural written language. Even now many teachers do not really know what kind of reading activities they need to offer in order to support the level that the child has achieved. Montessori has a very clear and simple solution to this dilemma: when the child can form words he is being prepared to read words and when he can form phrases he is being prepared to read phrases and so on. So that the development of reading follows the way in which the child has acquired his oral language in the first three years of life. First he made sounds, then words, then phrases and then sentences. So first he should be helped to write and read sounds, then words, then phrases and then sentences. In this way what he is reading is reinforced by what he is writing and capable of spelling. As Diane McGuinness says:

‘The more compatible the materials across all three skills: reading, writing, spelling, the faster the children will learn and the less likely they will be to develop reading difficulties.’

The problem in traditional schools is often that the text offered does not always reflect the complexity of the words that the child has learnt how to read. It is of no use teaching a basic phonetic code and then offering books that do not on the whole follow this basic code. She goes on to say that children should always be given reading that matches their stage of understanding of the phonetic code.

‘Teaching the beginning reader is accomplished by keeping to materials and exercises that are mutually reinforcing and complimentary. If a child is just beginning to master 1-to-1 mapping of consonants and simple vowels, he or she should not be expected to read text written at a more complex level of logic.’

This is certainly supported by the Montessori approach. His first reading experiences are in the reading of single words. As soon as the child masters a particular part of the phonetic code his skill is immediately put to use in practicing reading at this particular level. For example, when the child has been given an introduction to the basic phonetic code his reading practice with the Object Box is with phonetic words. Whereas, when he has been introduced to other spelling patterns with the Reading Folders his reading practice is extended to include words that include these patterns with the cards for Classified Reading. As Louisa Moats says

‘Children want to be self-reliant readers and are delighted when they can apply what they know.’

As he grows in confidence the child is encouraged to start to write phrases and then sentences and even whole stories and poems on the Moveable Alphabet. In his reading he is then also given phrases, sentences and eventually whole poems and stories to read. In this way the focus is both on understanding the phonetic code and

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applying it and this approach is exactly what is advocated by the National Reading Panel in the United States. Montessori suggested that the child should not be given books to read until he had moved naturally through these developmental stages of reading for himself. As she says:

‘A book is concerned with the language of thought and not with the mechanics of expression. This is why a book cannot be understood by a child before he has mastered logical language. There can be the same difference between being able to read individual words and knowing the sense of the book as that which exists between being able to pronounce a word and making a speech.’

Montessori also recognised the important role that reading for meaning plays. Current recommendations suggest that if teaching of the phonetic code is also linked with ‘meaningful connected reading’ we can expect ‘superior reading achievement’. As Adams says:

‘They need to sense the utility of their phonics lessons as soon as possible.’

This seems rather an obvious conclusion to Montessori trained teachers who have been applying this approach for years. When the child is given slips to read in the Object Boxes, the child is given the context of the objects. When the child reads Action Cards, he knows that the words are something he has to ‘do’. When he reads the phrases in the Function Games that are related to the objects before him he has to cut up the words and reconstruct the phrase so that it has meaning. The examples of meaningful reading extend right through the reading approach.

When the children had mastered the reading of words Montessori would write messages for them in the form of short phrases and then sentences. When she wrote these messages for the children she could see that they experienced for themselves the power of the written word, which could convey the teacher’s thoughts without a word being said. She also noticed that the children would fall silent while they read them and then as understanding dawned they would carry out whatever action the message asked them to do. The children’s silence led Maria Montessori to the idea that children should not be asked to read aloud when they are first learning to read. As she says:

‘The written word does not indeed need speech. Its whole grandeur is only understood when it is completely isolated from the spoken word.’

Reading aloud requires two skills – the ability to interpret what is written and the ability to articulate it. If children are trying to read the words in order to understand their meaning they should not be hampered by having to articulate them when this is a skill in itself. In order to articulate meaning we need to understand the thought being expressed – not just the meaning of that particular word but the meaning of the word in the whole context of the sentence conveying the thought. This requires us to hold in our minds what has already been said, to look ahead to see what is going to be said and at the same time convey the contribution that each word makes to the whole thought at the time that we pronounce each word. This is a pretty sophisticated skill when you analyse it! As Montessori says:

52 http://www.nationalreadingpanel.org
54 Adams, M.J. Beginning to Read. The new phonics in context. A precis of the classic text. p12 Heinemann Educational, Oxford
'Words which are the product of the interpretation of individual alphabetical symbols come with effort, and the meaning which comes from the interpretation of the entire sentence, as the eye reads word by word, and translates into sound, is apprehended and reduced to expression with difficulty. To give a fairly intelligible expression to the meaning, the eyes have been obliged rapidly to traverse the sentence as a whole, while the tongue has been laboriously and monotonously pronouncing one word after another.'

In order to facilitate the child's ability to read aloud Montessori says that we should first let him read the sentence silently so that he can understand the thought being expressed and then let him read it aloud. The ability to read aloud without this preparatory silent reading does not come naturally until around the age of seven and yet it is very common in traditional methods to ask the children to read aloud to the teacher as often as possible because this is the only way of finding out if their reading has progressed. Often when a child is asked to read aloud the teacher will continually interrupt either to correct the pronunciation or to assist in interpreting the meaning of the text. The problem with this is that because the child's attention is continually focused on the detail of pronunciation it is less likely that his brain is able to find the time to focus on the meaning. If we are really going to help the child to read then we should not ask the child to read aloud until he has mastered the mechanics of reading and is able to interpret the meaning of the words.

In reality, the art of expression is really an additional skill which has more to do with dramatic art than the interpretation of reading and it must be taught in addition if we want the child to gain the skill of reading aloud to a group. However, even as adults the art of expression when reading aloud comes much more naturally to someone who is reading about something that he has experienced for himself and feels passionate about than someone who is reading something that he knows little about and has to interpret the words for himself as he reads. It is the same with the child - interpretation of what he is reading is vital to expression and this can be helped by activities that help the child to identify himself with what is being read. As Montessori says

'.. we should be less concerned with timbre, with tone of voice and gestures, all extrinsic aspects of this art, than with intense vivid interpretation which brings the child to an identification of himself with what he reads.'

Identification with what is being read is a vital part of the Montessori reading approach and this is described in the next section.

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6. Total Reading and the Simple View of Reading

The National Literacy Strategy in the UK advises that the teaching of reading should be guided by what is known as the Simple View of Reading which suggests that there are two aspects to reading – word recognition and language comprehension. Teachers must pay attention to both aspects if a child is going to be helped to read fluently. Whilst language comprehension will not happen at all unless the child has been helped to recognise words, the converse is also true and the fact that the child is able to read the words is no guarantee that he has understood what he has read. These two aspects are also recognised by Adams. In her organisational model for reading the phonological and orthographic processors support word recognition and the meaning and context processors support language comprehension. The Simple View of Reading does not give a very clear idea of exactly what is meant by language comprehension and teachers are left to assume, quite rightly, that they must simply help the child to understand what he is reading. Montessori, on the other hand, has a much more ambitious aim for language comprehension. She suggested that in addition to the child being given ways to decode and to understanding meaning, he should also be given activities to help him appreciate and love what he is reading since it is only through the appreciation of the style and beauty of the written word that we can access the totality of what reading has to offer. In speaking of this approach, which she called “Total Reading” she says:

‘One must realize that if some words are printed they must be worthwhile appealing in some way to that group of humanity. We have therefore a whole forest of attractiveness which is presented in books. There is an attraction in them for the mind. There must be an appeal: Therefore it is an exploration along the lines of an attractive forest of thought that we are leading the child. In order that he may make a harmonious whole out of it, we must give him the possibility of total reading. They must get all the possible force and beauty out of it. If a person has an educated mind, they can realize the points of beauty. They can see it clearly, not just vaguely. You must have an educated mind to appreciate the details. Therefore educating along these different channels of reading will bring the mind to a height that it can appreciate the beauty of the words.’

This approach not only ensures that reading becomes something the child wants and chooses to do but it also gives the child a further insight into what the writer is trying to convey because he is also able to infer further meaning from the style of the authors writing. For this reason she says:

‘As teachers who wish to help the children to read, we can only maintain their interest if we give them the guide which is needed if they are to get all that there is from reading. We must lead the children to “total reading” and not be content with superficial reading…. Few are “total readers” for the mind is not trained to it. You have to guide the mind step by step to take from the reading the totality of what is expressed.’

Maryanne Wolf also refers to this idea when talking of her stages of reading. When the child appears to reach the stage of ‘fluent, comprehending reading’ she warns teachers not to be lulled into the idea that he understands all that he is reading. He may comprehend the facts that he is reading but this does not mean that he has

59 http://www.standards.dcsf.gov.uk/phonics/rosereview/
60 Adams, M.J. Beginning to Read. The new phonics in context. A precis of the classic text. Heinemann Educational, Oxford
62 Montessori, M. [1946] Lecture 20, October 19th
63 Montessori, M. [1946] Lecture 22 London Lectures
understood the ‘totality of what is expressed’. She parallels the Montessori idea of ‘Total Reading’ when she says:

‘Even when a reader comprehends the facts of the content, the goal at this stage is deeper: an increased capacity to apply an understanding of the varied uses of words – irony, voice, metaphor and point of view – to go below the surface of the text. As their reading becomes more demanding, good readers’ developing knowledge of figurative language and irony helps them discover new meanings in the text that propel their understanding beyond the words themselves.’

When Wolf talks of the ‘expert reader’ it seems she has in mind the same idea as the Montessori concept of the ‘total’ reader.

How, then, does the Montessori approach support the processes we know to be involved in reading. It is clear that Adams orthographic and phonological processors are supported by all the activities in the Montessori approach that help the child to become familiar with the alphabetic principle and to decode the words in front of him. If we think about the steps that the child takes to achieve this it is interesting to reflect whether the ‘novice reader’ even exists in a Montessori environment. Since the children are given activities to break down the sounds in their language as soon as they arrive in school and are not expected to read before they are given the key to the alphabetic code they never have to stumble through a children’s reader trying to infer the meanings of the words from the pictures. They emerge from the ‘pre-reading’ stage straight into the ‘decoding’ stage. We cannot underestimate the importance of the ability to decode. Clearly the child cannot read if he can’t decode the letters written on the paper in front of him but the ability to be good at decoding also has clear implications for understanding meaning. We talk about the need for achieving reading fluency as if that is a goal in itself. However, the real advantage of reading fluency is that the child’s mind is freed up to comprehend what he is reading. As Maryanne Wolf says:

‘Fluency does not ensure better comprehension; rather fluency gives enough extra time to the executive system to direct attention where it is most needed – to infer, to understand, to predict, or sometimes to repair discordant understanding and to interpret meaning afresh.’

If this freeing up of working memory capacity is important then presumably any activity that increases the child’s working memory must also help the child’s ability to read. So when the child in the Montessori environment trips from one mat to another remembering the size, sound, smell or feel of a particular object in the Sensorial Games and he practices using his working memory surely this will also aid his ability to read.

What is it then that enhances the child’s ability to understand what he reads? First of all if he is going to be able to attach a meaning to the words he reads then he needs to have a good stock of oral vocabulary to call upon. In Adams terms then the ‘meaning processor’ must be full and ready to supply meanings in response to the word. The Montessori approach places a lot of emphasis on the development of oral vocabulary. Recognising that the child is particularly sensitive to language in the first years of life a Montessori environment is brimming with opportunities for the child not only to increase his vocabulary but also to enrich it. From the moment the child arrives he is given a name for everything he uses in his environment – and not just the name – he is also given the names of the parts of that item. So he is not just given ‘jug’ but ‘rim’, ‘spout’ and ‘handle’. As well as names for the things he uses he is given the names for the things in the room like ‘radiator’, ‘mantelpiece’ and ‘stairwell’. And not just those inside but also those outside – the flowers in the

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garden, the things that he uses outside like the sandpit or the wheelbarrow. He is given the names of the flowers – if he can learn the word flower, then why shouldn’t he be able to learn the word ‘daisy’, ‘rhododendron’ or ‘lupin’? And why shouldn’t he be able to learn the names of the parts of the flower? The ‘stamen’, the ‘corolla’ and the ‘sepals’ are no more complicated to a small child than the words ‘milk’ and ‘biscuit’ and we wouldn’t hesitate to give them names for these things. As Montessori says:

‘You may think it is difficult for the child of three years to absorb such enormous quantities of scientific terms. It must be remembered that scientific terms are also names of the objects in the child’s environment. Everything in the world has a name; and to a child hungry for words, all names are welcome, scientific or otherwise. The child absorbs things from his environment. We can place the things and the names in his environment. He absorbs both; directly associates the things with the names and increases his mastery of things and names, with the facility with which he learnt to speak his mother tongue in the earlier parts of his sensitive period. When the child is in the sensitive period and has a hunger for names (which is also a hunger for knowledge) you may give him names in biology, botany, physics, zoology or any other science.’

In a Montessori environment Classified Cards are also used to increase vocabulary. The cards give an opportunity to offer an infinite number of words to the children but they also make it possible to offer the words to the children in groups of words that are associated with each other in some way. The child has a natural tendency to classify information so if this is offered in a classified format it is easier for him to relate it to the information he already has. Then when he comes across new words he is able to file them away in the appropriate place in his mind – so his meaning processor becomes a well-organised library that information can be retrieved from with ease rather than a room where all the books are just piled high in random boxes. As Montessori says:

‘Each impression is perfectly distinct from the other, and has its own predetermined place in the mind, which may be recalled by a word; henceforth new acquisitions will not be thrown aside or mixed together chaotically, but will duly be deposited in their proper places, side by side with previous acquisitions of the same kind, like books in a well-arranged library.’

All of these words we have spoken of so far are nouns of course. But games are also played to help the children become aware of the different parts of speech such as prepositions, conjunctions, adjectives, verbs and adverbs. In the games the child is able to experience the meaning of the words for himself because the activities involve manipulation and movement. For example, when he is given to the opportunity to ‘clap softly’ or ‘clap loudly’ he is introduced, through his own experiences, to the idea that ‘loudly’ or ‘softly’ tell us how to do something. Of course, at the same time the child is being exposed to a whole range of vocabulary through stories, songs and poems.

As well as vocabulary there are other cues for the child that will help him to understand the meaning of what he is reading. As Adams says meaning can also be implied by the context for the word, which will depend in part on the role of that word in the sentence and also on the child’s wider experience of the subject being written about. Context is used both at the word recognition level and also the language comprehension level. When a child is still trying to master the decoding of words the context can help him to choose the right word even if he doesn’t recognise the spelling pattern but at the language comprehension level the child is more conscious of what he is doing. He will correct himself because the context tells

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him that the word must have a different meaning than the one that he first assigned to it. In the Montessori approach the child is offered some activities that help him to become aware of the function that different words have in a sentence and this helps him to select the right meaning for a word according to the context. These activities are not given in an abstract way that he may find hard to understand. Just as with the oral games the child is given an opportunity to experience, in a concrete way, what these words really mean. So for example, in order to understand the functions of words that tell you to do something [verbs] he is first has to ‘do something’ and to understand words that tell you where something is [prepositions] he has to manipulate objects into the positions suggested by the words. This is not teaching grammar as such but it helps the child to classify all the words he might come across according to their function in the sentence and this gives him another way of organising the thousands of words that he might come across when reading. As Mario Montessori says:

‘..in grammar there are only nine parts – all the thousands of words fit into one these nine groups. With a knowledge of the nine groups the mind is able to realise the function and use of every word. Therefore at the beginning of reading we start by giving a vision of the function of the different groups of words. We are not going to give the rules of grammar: but we are going to give the vision of the functions – so that the child is struck with the function of each word.’

In these games the child is also helped to become conscious that the order of words conveys meaning by transposing the words to see if the sentence still makes sense and then to become conscious of the pattern of the language by placing symbols for the different types of words. In this way he is being helped to understand how order and context affect meaning. For example, in English a word that comes before a noun is usually a word that tells you ‘what kind of’ thing it is. These activities are helpful since, as Adams says, fluent reading requires for the child to be able to bring together the work of all the processors. ‘For the connections and even the connected parts to develop properly, they must be linked in the very course of acquisition.’

Montessori’s Function Games offer a unique way for the child to link the work of the different processors. The exploration that the child is carrying out then becomes a constructive activity that assists his reading because it helps him not only to predict what a word might mean but also to practice the skill of using context and order to predict meaning when reading any other text. In addition, the child is encouraged to explore the different functions of words in an order that follows the order in which he first acquired his own oral language and this makes it possible for him to make good use of the knowledge gained by utilising his own natural processes for language development:

‘A child first begins to know nouns, that is the names of objects, then words that refer to these nouns [adjectives], then prepositions [relating to the relative position of objects], and finally conjunctions [which show how the objects are connected].’

When Grammar is offered traditionally it does not really offer help to the reading process because it is done once the child can read well and involves the deconstruction of the sentence in order to assign roles to particular words. Montessori explains the benefits of this:

69 Montessori, Mario [1946] London Lectures p138 unpublished
70 Adams, M.J. Beginning to Read. The new phonics in context. A precis of the classic text. Heinemann Educational, Oxford

Primary Training Programme: Second Tier Why Montessori Children Can Read and How They Do It by Louise M Livingston
‘How different grammar will seem to the young pupil, if, instead of being the cruel assassin that tears the sentences to pieces so that nothing can be understood, it becomes the amiable and indispensable help to the construction of connected discourse.’  

A similar exploration of the role of words in the sentence is carried out with the Reading Analysis activities. In this case the child first acts out the meaning of the whole sentence so that he can have a real experience of the meaning of the words. Help to the processes of understanding the meaning of words is also offered by other activities which invite the child to explore definitions of natural things such as land forms or parts of a plant or leaf.

As the child’s ability to read develops he starts to understand a lot about the way in which words are formed. He starts to understand that many words have roots or stems to which prefixes or suffixes are attached and that the way in which a word is put together conveys meaning. For example, he realises that adding an ‘s’ or ‘es’ to a word indicates a plural and that ‘ed’ indicates the past tense. He has added these things unconsciously to his words when he has been creating his oral language but now as he reads them he becomes more conscious of them. It is helpful for him to understand meaning to know what ‘un’ or ‘re’ mean when added to the root ‘done’ and that signer, signed and signature are all related to the word ‘sign’. As Maryanne Wolf says ‘what’s in a word’ can be very helpful when the child is trying to understand what it means. But as she goes on to say

‘Children too rarely receive explicit instruction in this second half of what makes English a morphophonemic language…. words like ‘sign’ and ‘signature’ provide perfect ways to illustrate to children the morphophonemic nature of the English writing system and the very good reasons for seemingly unnatural silent letters like ‘g’ in sign and ‘c’ in muscle.’

It appears that the Montessori approach is quite unique in giving attention to the morphology of words however. The Word Study activities allow the child literally to study how plurals are formed, how the feminine may be formed in relation to the masculine and how suffixes and prefixes are attached to roots to form new words. This is not about teaching plurals or masculine and feminine forms of words since these have all been absorbed at the pre-reading stage. Neither is it an academic analysis of how words are made, the children are literally given the opportunity to study their own language by reading groups of words that highlight the connections and differences. This exploration not only helps them to understand meaning better but also helps them to decode words that are made up of several units of meaning.

Let’s return then to the third thread in Montessori’s ‘Total Reading’ – the idea that we should provide activities that help the children to appreciate the style of reading so not only do they come to love reading even more but they are also able to understand more about what the writer is trying to say because they are able to interpret the messages hidden in the writer’s unique style. If we think about what kind of things contribute to a writer’s style then this can give us some idea of the kind of activities we need to offer to the child. Style involves choice of words, structure and order of words and level of complexity of the sentences. The foundation for understanding style of writing is laid down at the oral level. As Maryanne Wolf says:

‘…when children are able to use a variety of semantic and syntactic forms in their own language, they are also better able to understand the oral and written language of others. This linguistic and cognitive ability provide a unique foundation for many

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comprehension skills a few years later, when children begin to read stories of their own.²⁴

The child in the Montessori environment is given opportunities to explore all of these aspects of style in an oral form first. He is read books and poems with a variety of styles, not just ones written specially for children with a simple style but ones with more complex language and words that they don’t yet use for themselves or even understand. This is very helpful as Adams says:

*The single most important activity for building the knowledge and skills eventually required for reading appears to be reading aloud to children. In this, both the sheer amount of and choice of reading seems to make a difference. Greatest progress occurs when the vocabulary and syntax of the materials are slightly above the child’s own reading level.*³⁵

When children are read to it gives them another means of putting the language that they are absorbing from the people around them into some kind of context and helps them to familiarise themselves with the form of written language which is different from spoken language. Maryanne Wolf explains:

*When words are not heard, concepts are not learned. When syntactic forms are never encountered, there is less knowledge about the relationship of events in a story. When story forms are never known, there is less ability to infer and to predict. When cultural traditions and the feelings of others are never experienced, there is less understanding of what other people feel.*³⁶

In addition to hearing stories the child is also given games like the **Oral Question Game** where he explores the structure of a story for himself. When he can read the **Function Games** and **Word Study** help him to explore the order and the structure of words in his language. In the **Reading Analysis** activities he explores the role of the words and phrases in a sentence and how these are related to the verb. Because the sentences he is examining are all taken from examples of good children’s literature he starts to appreciate the different styles of different authors and the way in which style can be used to convey meaning.

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³⁵ Adams, M.J. Beginning to Read. The new phonics in context. A precis of the classic text. p46 Heinemann Educational, Oxford
Conclusion

If we are to believe what Dianne McGuiness says about the aspects of a good reading programme it is not surprising that ‘Montessori children can read.’ She says that a good reading programme should include:\n
- Training in awareness of the phonemes in speech
- Teaching the alphabetic code the way it was written, that is, from sound to print
- Connecting phonemes in words to individual letters and letter combinations
- Teaching in a logical order, starting with simple activities and moving on to more complex ones as the child’s developmental level dictates
- Eventually giving the whole spelling code but starting with a basic code
- Teaching by exposure and example using brief, clear explanations
- Making sure the child is actively problem solving and not passive

As we have seen the Montessori approach encompasses all of these aspects by taking an approach that isolates one difficulty at a time and helps the child to master that before another layer of understanding is tackled. This ensures that the child’s developing knowledge is always built on a firm foundation. We see, for example, that in order to master the mechanics of reading, first the child identifies the sounds in his own speech, then he attaches symbols to these sounds and uses them to write words, which familiarises him with the phonetic code and allows him to read words. Once he can read words that are phonetic in nature he is shown how to read non-phonetic words. In parallel with this he is being helped to understand the meaning of words by activities that increase his oral vocabulary and his awareness that the written word conveys meaning. The two parallel streams come together so that he can understand the meaning of what he is decoding. This is just one example of how throughout the approach the child is given isolated experiences, which become integrated through his own activity because these activities draw on his natural developmental processes. The ability to read emerges as the child’s natural acquisition just as speech emerged during the first years of his life. It is not surprising then that when asked who taught him to read the child in the Montessori school will reply with indignant surprise ‘No-one, I taught myself’ because he did.

Furthermore, because the Montessori approach follows the path taken for the natural acquisition of spoken language and draws on the child’s processes for this learning to read is not simply a means that enables children to ‘read to learn’. Of course it will provide this but as Montessori says when the child learns to read during the time in his life when he is also building all the aspects of his own human personality then learning to read also becomes an aid to his process of development. The very fact that he is given the opportunity to study his own language enhances the formation of the language he is studying.

‘Reading, therefore, penetrates directly the level of culture, because these exercises are not limited to reading only, but form part of a progress in knowledge – the study of one’s own language.’\n
It seems then that children who are taught to read using the Montessori approach pioneered 102 years ago in the back streets of Rome are given access to the kind of activities that will help them to become what today’s neuroscientists describe as ‘expert readers’:\n
‘readers who know how to activate prior knowledge before, during, and after\n
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reading, to decide what's important in a text, to synthesise information, to ask
questions, and to self-monitor and repair faulty comprehension. Isn’t that what we want for our children?