Terms of Reference

The social, cultural and educational factors affecting the education of boys in Australian schools, particularly in relation to their literacy needs and socialisation skills in the early and middle years of schooling.

Social: No matter what social conditions prevail, the school could and should function as a microcosm of society – but a strong leader is needed. A teacher can create social conditions in a classroom. Each class can function as a family.

Cultural: All components of literacy are cultural. We say "nine" and are referring to a number. Germans say the same sound and mean "no". We read "pain" and think of hurt, whilst to the French it means "bread". Words are abstracts having only the meaning a culture ascribes to them. The learning of abstracts should be based on direct teaching rather than on the hope and assumption that they will be picked up.

There are areas in the brain for sight, hearing, speech and even for reading. Each area should receive direct stimuli and there seems to be a cut off point for development of some areas – eg the child who hasn't learnt to speak by age seven is most unlikely to ever become proficient.

Educational: The committee should understand the complexity of the printed word. Spoken words (abstracts) are converted to print through a code, the symbols of which are also abstracts. Unlike the learning of a number, which is also represented by an abstract, the teaching of reading cannot proceed from the concrete to the abstract. The brain must convert one abstract into another abstract form. To complicate things further, the brain operates through electrical and chemical processing, not through <u>physical</u> storage of facts.

The assumption that a child will mentally "photograph" whole words and be able to <u>read</u> them fallacious¹, and the belief that a child will read simply as a natural progression from speaking the language and because he/she sees print constantly is childish simplification. Knowledge of the code is the essential key to reading, for it allows the child to focus on detail – pal or pat? dear or clear? modern or modem? Children learning to look and say whole words are only getting an <u>impression</u> of reading.

The strategies which schools have adopted to help address these factors, those strategies which have been successful, and scope for their broader implementation or increased effectiveness: The failure of boys in the classroom has been growing since the 1960s. My own primary schooling experience (1935 – 1943) of huge classes due to wartime shortages, has no memories of boys who could not read at all. Nor do I remember children exhibiting uncontrollable behaviour. All children could read on a sliding scale from the same reading book. We had no groups reading books of a lover level and no child left the room to read with parents or aides. Even the poorest reader could read something and the common small words were met with relief. (However, it has been noted now that it is the smaller words such as "in", "at", "and", that poor readers now are unable to read).

¹ There are children who become instant sight readers but they are rare. Their ability to read whole words is a gift, not a learned skill.

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When I began teaching in 1950 I taught children in their second year of school. I noticed no universal difference in the ability of boys or girls to learn to read words. Invariably, however, the one poorest reader in the class was a boy, who could always read the small words but baulked at the longer ones. I also noticed that, in the main, girls read with more expression than the boys. Pattern reading helped all in this regard. At no time, in any subjects, did I feel that the girls' word was superior to that of the boys. I note that F.J. Schonell in his book "Backwardness in the Basic Subjects" (Oliver & Boyd, London, 1942) makes no mention of boys' failure being so much greater than girls'. He speaks of children, except when he cites individual cases and his first mention of boys in general is in relation to differences which manifest at puberty.

There is an additional historic fact that is rarely mentioned, quoted here from "A Child's Mind" (Muriel Beadle, Macgibbon & Key, 1971)

Stress on phonics (for teaching reading) was dominant in the early years of this century, but when reading research showed that adult readers' eyes moved along a line of text in a series of jumps, taking in several word-shapes at a single glance, educators thought it made sense to teach children to read in the mode they would use as adults. From the 1920s onward, therefore, word-recognition, the "look-say" method was a favoured teaching technique.

Then in the 1930s Rudolf Flesch's "Why Johnny Can't Read" had such an impact on the public that parents pressured the schools to use more phonics-based methods"

The experts ignored all the practice the adults had had to bring their reading to a point where the words could be scanned so quickly they were taken in at a glance. (Also note, it was "Johnny" who wasn't reading, not "Jenny" or "Your Child"). In Queensland, the public outcry about the failure to read, incited by Flesch's book, would be approximately the time that four Preparatory Readers were written, introducing phonic elements gradually. These primers were use with great success until c1965 when Look and Say reading was reintroduced in spite of its proven previous failure. It was this return of the whole-word, phrase reading method that ushered in the epidemic of dyslexia in the 1970s. The method can seem to succeed for the first few years of the child's primary school life but, as the vocabulary requirements increase in the middle and upper grades, many children cannot cope due to limited reading skills. Many children were found who reversed letters and words and they were dubbed "dyslexic" rather than being recognised as children who had not been taught decoding and other reading skills. Although the disorder was recognised and named by the ancient Greeks, its incidence was rare and was not mentioned in my studies at Teacher Training College – nor was it mentioned in H.E. Haines' textbook on psychology used in College in the 60s. Schonell did not mention it as a cause of reading failure either. Rather, he speaks of the need for "short, systematic lessons of a scientific kind" (ibid, p199) for children experiencing problems with reading. Even when using the phonic primers, we always had a few children who confused "b" and "d", even into year two. A very few may have also confused p/q, but never n/u and m/w as is claimed today. Some today even confuse s with the numeral 5, due to lack of adequate teaching in both literacy and numeracy.

I should like you to realise that the problem you are investigating would appear much worse if parents were not actively involved in teaching their children at home and at school. Such parental input was not required before whole-word reading was reintroduced. As a child going to school, my mother did not concern herself with my ability to read and when I myself taught from the phonic readers I never needed parental input either. Today, books are sent home to be read and list of words to be recognised (note recognised – rote spelling of any kind is frowned upon).

The cost of teaching a child to read has increased enormously as different reading schemes were bought. Budgets both State and Federal set aside ever increasing sums for the teaching of literacy. Again, please note that the results of modern methods would be so much worse were it not for many parent spending hundreds of additional dollars on reading schemes or for tutoring their children in the basics of both literacy and numeracy. This extends the school day of the child. All this flies in the face of knowledge that small children are mentally tired after 1pm on school days and cannot concentrate then as well as they do in the morning. Five and six year olds should be free to go home to play.

Children in Queensland used to spend two years learning to read. The method was based on first teaching the 26 letters of the alphabet with one basic sound for each. Then we taught word building – at-bat-cat-fat. After showing a few, we asked the child "Which letter would you add to "at" to make "pat"? "sat"? and so on. The child then became an active participant in the learning at a level commensurate with age and with a judiciously controlled input of abstract coding. The whole 18 month program with six months of revision, was carefully crafted in weekly units so that phonic elements were introduced slowly and in logical sequence (eg "two dogs" was read before "the dog's tail). Words were constructed, analysed and studied even though the reading content in which they were written was, at first, limited. The content of text was not important at this stage. Like the tongue-twisters used in teaching speech-sounds, or the five finger exercises for budding pianists, the aim was to give practice in skills, not to entertain. We were teaching reading skills such as left to right eye direction, learning to scan words (two letter, then three letter then gradually, more letter words) as well as decoding the letters. Today, nearly all the emphasis is in reading sentences and stores with comprehension of text being of prime importance. Study of individual letters, words, punctuation and grammar is scant. It is assumed all will be learnt from context.

One of the common sense advantages of the primers set out in weekly units was that, if a child transferred anywhere within the state, they would at least find that they were reading from the same book, even the same page, as at the previous school. This is not so today. Along with the many changes a child must cope with, they are most likely to encounter a different reading scheme with unknown vocabulary. The security of the phonic readers lay in the fact that the child could decode almost ever word on their own. Words that could not be sounded out (one, the, who, he) were kept to a minimum, rarely more than one per week). These irregular words were learned by rote spelling which kept the focus on the letters and sounds. Thus the child was, mainly, in control of the text. C1960 to 1965 Happy Venture readers were introduced into all schools in Queensland. The new readers depended upon the child learning to recognise words as wholes without first learning the look of or sound represented by the letters. Thus rn and m could look the same. The child was not taught to construct words, thus learning to group – an, ban, can, fan etc. Words were

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presented – Dick, Dora, here, is Mother, Father, dog, cat and so on – in an ad hoc manner. Note that the new method was not introduced in response to parental or employer dissatisfaction with levels of literacy. Rather, it was promised that children would read more quickly, more fluently and with less effort. In fact, a booklet written for the Australian Council for Educational Research in 1952 promoted the method promising "Failure will be eliminated". The new method would be "fun". Words were printed on flash cards and children were to recognise them as letter pictures or shapes. They were encouraged to note the shape of the word rather than look at the letters from which each was built. Children were presented with conflicting sounds for symbols as well as the visually confusing d/b with a capital D thrown in to confuse even further. In a repeat of the failure using this method in the 1920s. children were having trouble with reading; using the "whole" method, the child either knows the word, or doesn't. If asked to try harder, they can only stare harder. This time round the problem was accepted because it was given a name – dyslexia. It was suddenly being recognised that "boys don't read as readily as girls" for it was the boys (like Johnny) who were failing once again. The failure of boys in the classroom became an accepted fact. Most schools, 40 years later, are still using a wholeword/whole-text approach to reading from Day One of Year One. Small repetitive books are used "I am a clown" on one page with a picture of a clown facing the text. "I am a cat/dog/horse/monster" are presented in the same way. Some children say after the first or second "reading" – "I can read it with my eyes shut". Are they reading? No. they are remembering. The look at the picture as they mouth the words. It becomes obvious that this is not the child really reading, or even learning what reading is about. Lists of words are culled from the books and sent home for parents to do most of the work. Thus, discrimination through the accident of birth is further entrenched. For many children, the only way out of an underprivileged home environment depends upon education - yet now education system depends on personal parental input. As shown by the growth of adult literacy programs, some parents are unable to read themselves.

The study of psychology states many truths that prove the unsuitability of any "whole' method of learning to read. I shall quote only two. Professor David Suzuki states that the brain copes with complexity by grouping and classifying things in the environment. Reading is a complex mental environment in which the brain must interpret what it sees as something else (ie – turn a number of shapes into a spoken word). So considering this, which approach seems to suit an as yet underdeveloped brain of the five/six year old?

ed-bed-led-fed-Ted

or

Here, Dick, Dora, Nip, is

Professor Rollo May wrote in the forward to the four volume Encyclopaedia of Psychology, edited by Raymond J Corsini (John Wiley & Sons, NY, 1994)

Despite the fact that people in fields of education, medicine, the law and religion have for the most part taken many courses in psychology, frequently in their profession they pay little attention to what they have been taught. To paraphrase, they haven't learned. He speaks of the need to operate in ways to foster mental health, to get back to the basic principles of psychology. Rollo May, BD, PhD, summa cum laude Columbia 1949, lectures at Princeton, Harvard, Yale and elsewhere, and has nine published works. These basics of psychology of which he speaks are vital to teaching.

To conclude this part of my submission, I can only state that most schools have adopted methods that promote the failure of children to learn to read.

WHY ARE BOYS FAILING?

If there is a problem with a basic skill used in education, it is safe to assume that the problem has its roots in the infant grades, which is when the development of new skills opens in the brain. All learning takes place in the brain and if the brain is confused and disturbed by the "learning" process, disorders are likely to ensue. When we began using the whole word method, we continued to teach the children to write and we worked from a spelling list. I believe the spelling (learned by rote) helped a little with reading. All this gradually changed. We continued to teach writing but the spelling list was dropped. Each child was to collate their own list from their own creative writing. Hyperactivity started in a small way. In a submission to the 1991 Inquiry into Literacy Needs in the Workplace, Dr John Vaughn stated "Children learn to walk by walking and to talk by talking. They learn to read by reading and to write by writing" (Vol 4, p275). Note the word "and". This assumption of learning doubled the burden placed on the child. From the very beginning, children were asked to read and write stories with no knowledge of or guidelines on how to attempt either. In 1985 this "whole language" method was adopted in most Oueensland schools and ADHD became a fact of life. Again, males outnumbered females in sufferers of this disorder - by five to one. Why?

From birth, the male is more likely to be disadvantaged in several areas – he is

- more likely to be colourblind
- more likely to be autistic
- likely to be slower to learn to speak
- more likely to stammer, stutter or have speech processing problems

When he begins school, the male is more likely to develop Special Learning Difficulties and/or ADHD. The high school student, male, is more likely to incur detentions or suspensions, to reject study and drop out, or even to develop Tourette's syndrome. The male in late teens is more likely to turn to alcohol, drugs or chroming, is more likely to commit offences leading to jail, more likely to develop schizophrenia and more likely to commit suicide. These are statistically proven facts.

In the 1950s boys were as much at risk from birth up until the time they went to school, but they achieved at school as I have stated from experience, and they are still capable of achieving as the Overall Performance ratings in Queensland prove. In 2000, 307 boys and 300 girls achieved the top OP1 rating, but from OP2 to OP25, boys failed to keep up. I would assume these type of figures must have been registered in each state for the Federal Government to institute its Australia-wide enquiry.

If we are to determine the reason for boys' failure, we must take into account levels of literacy and numeracy. It stands to reason that the poorer reader is going to have to spend more time in an effort to do as well as someone who can read automatically and thus absorb information more quickly. We must therefore again consider the brain for it is totally in control of the human and his or her learning. So, why are males failing to learn to read today as they did in the 1920s ("Why Johnny can't Read")? Psychiatrists tell us that male and female brains differ greatly. Neither is inferior to the other, each simply has its strengths and weaknesses. If boys are failing, giving up in school, the answer must lie in the brain for it is truly designed for learning together with all its other regulating and survival functions. Others may prattle about socio-economic status and other variables, but the generation schooled during the Great Depression of the 1930s and the years of hardship of World War Two showed no great difference between boys and girls in results of the three public examinations during those years. There was no concern that "boys don't perform as well as girls".

Below are some examples of the male/female brain difference that can impinge on learning:

- 1 A male brain can be vastly different to that of the female simply by virtue of the different hormonal activity
- 2 In the female, the brain's left hemisphere develops more rapidly than in the male. She is most likely to, as a result of this, speak sooner/better, read earlier/more easily and with more expression which often enhances comprehension.
- 3 It has been suggested by some researchers that while females demonstrate specific areas for speech in the brain, in young males speech operates more widely throughout the left hemisphere in no specific sector. This then confirms the need for organised learning to help create brain circuitry paths. I feel that this finding about speech suggests that boys have more trouble organising abstract information and need more help to do so especially when learning to read.
- 4 Males have logical, problem solving brains which, in the young male, work best in concrete situations. Boys like to take things apart and engage in physical activity. Girls tend to make-believe play. Phonic teaching is logical – building words is like solving a problem, putting something together with separate pieces to make a whole.
- 5 The female brain is process oriented. The male brain is solution oriented.
- 6 The female has a better visual and auditory memory and so is better equipped to cope with whole-word reading. Reading should not be based on visual memory or words, it should be based on decoding. Every letter is important. A Canadian educator discounted the idea that the eye could scan every letter of every word on a page but it has been stated that the eye is capable of billions of calculations per second – quite enough to scan a page with time to spare.
- 7 The female brain can multi-track/multi-task it can access and integrate different areas of the brain – can think in different directions – can follow different conversations. The male brain prefers to mono-

track, to do one thing at a time eg: watch TV <u>or</u> talk, either/or but not both. If map reading, he will most likely turn off the car radio to concentrate on looking without auditory distractions. Learning to read demands the integration of visual and auditory stimuli, as well as developing a decoding area and accessing this area for language. For this reason alone, the favoured learning would appear to be the phonics approach which teaches skills and helps the child integrate them. Learning to read is a huge task for any five year old, let alone the five year old male brain.

- 8 The female brain both sees and hears details more easily it can separate and categorise/cluster better then the male. All these skills are vital in learning to read. The male brain can be trained in visual and auditory discrimination needed for reading, but only phonic teaching supplies this training. At the public hearing held in Brisbane, the previous Committee of Inquiry was told "Boys don't hear as well as girls". If each child's hearing was tested, I'm sure it would prove that both sexes receive auditory stimuli equally well, the difference lies in the processing of that stimuli – the "listening". This is not as highly developed in the young male. Eyes have to learn to see, and ears must learn to listen – most of us learn best if we are specifically taught rather than just "picking things up".
- 9 In general, young males need more help to organise physical and mental tasks.
- 10 The female has a richer, thicker band of nerves connecting the two hemispheres, and is thus able to exchange information between the two more rapidly. Being a multitasker, she can integrate all the left hemisphere areas necessary for reading (reading resides in the left hemisphere) and she can complement this with relevant right hemisphere skills – visualisation and intuition (guessing from context). Reading strategies sent home from current local schools advise parents to encourage the child to:

Look at the picture (right hemisphere) Look at the first sound and make a smart guess (both hemispheres)

Does it make sense with the picture? Reread the sentence (left hemisphere – reasoning and reading).

When held beside the research on hemispheric connectivity in girls verses boys, this strategy obviously favour the female.

11 The male brain wants the plain facts.

This information only scratches the surface of the reasons while the average male is placed at a disadvantage when whole-word methods are used as the first approach to learning to read. If you consider it, telling a child the word represented by the letters is not teaching, or guiding the child to learn. Asking the child to remember the pattern for each word forces the child to develop and devise their own strategies. Dr Elkhonan Goldberg suggests that it is the left hemisphere that copes with routine learning, whilst the right hemisphere looks for novelty. With each presentation of an item, the novelty appeal decreases and the right hemisphere loses interest. In the absence of phonic word-analysis (analysis is handled by the left hemisphere) the right uses its few learning skills – visualisation and shape or feature recognition. Schonell noted that children could read "little" when they couldn't manage "put" or "for". He probed and found that children remembered the "tt" pattern in the middle of the word. That's not reading. Using that device only, butter, cattle, fitted etc might also be read as "little". Today's children baulk at words such as *of, was, who, where, the, that, is* etc whilst supposedly reading *television* and *McDonalds* and *soldier* and *verandah*. They link words to mental pictures, and none is possible for the nebulous non-noun words such as "of". Even in this, girls have the advantage.

Both male and female brains can understand the phonic teaching of reading. Why is it not used when history has now twice proven the failure of look-and-say, whole word strategies? A good phonic program teaches at a level commensurate with the age and ability of the average child. A good teacher can easily extend and enrich learning through phonics for the above average child. The teaching and understanding of phonics builds both knowledge and self-esteem from within by increments because it works on providing input before expecting output.

At the time of writing, Ned Kelly's letters are being displayed in Australia. New was a child or dirt-poor Irish parents, and would have had a limited education, yet his handwriting if of practiced copperplate and his ability to express himself evident.

Dr David Livingstone came from a poor family and worked in a cotton mill at age ten. He later put himself through university because his few years of formal education gave him the ability to read further to educate himself whilst he worked.

I recently heard a man interviewed on ABC radio. He had spent his formative years from three to eight in a Japanese POW camp with his mother. He was asked whether, when reunited with his father, his parents' first concern was his basic education. "Oh no," he replied, "My mother taught me to read and write in the sand".

Boys - even ones from poor families – can be taught to read and so are capable of higher study. High-school teachers report that many of their male students switch off when the books come out. One remedial teacher at a Catholic high school told me that some seven years after the introduction of read-by-reading and write-by-writing she found for the first time boys who could not read a word and others who could read the words but had no idea of what they had read. Obviously the brains of these boys couldn't decode the words automatically and were so busy reading the words that they could not concentrate on what the words were saying. In this way they are like a pianist who hasn't practiced the notes properly and so can't add expression to their playing of the piece because they are too busy concentrating on the score.

Psychologists learn a lot about the brain by studying those that have been damaged – they can find where the brain does what, and when it can no longer perform the function. Using the whole word method of reading can affect many children in the same way as autistic children. Listen to the comments of parents with children suffering from autism.

"He used to be a bubbly chatty baby, but suddenly that all stopped. He became very quiet"

"Suddenly at 22 months he started losing his vocabulary. Words that he had been using, he just stopped using them".

Both of these children (boys) were diagnosed as autistic and it affected their speech. My theory is that some children learn to parrot a lot of words but do not take that next step - to understand language. Their parrotting of words dies off around the age when normal children are learning to construct with words - short sentences. "Mummy go". I also believe that children in the modern classroom are learning to parrot words but have little or no understanding of how words are constructed without this vital link they cannot read independently. When construction of paths of thought in the brain stops, the "path" begins to die (use it or lose it) and many lose what their teachers thought they know. The strategies (mentioned previously) that they are always encouraged to use as a first option - anything but decoding each letter - they are learning by the worst kind of rote. They try to store memories of the visual appearance only. After six months of this the brain has formed mental habits that are very difficult to eradicate. No wonder our boys are failing – again. It is indefensible that any child can go through their whole primary school years to be found to be a non-reader when moving to high school. The euphemism excusing this seems to be "he slipped through the net". Professor FJ Schonell states in his "Backwardness" (ibid) that the responsibility for knowing the nature and extent of reading backwardness throughout the school rests with the Head Teacher (p195). He also states that only in exceptional circumstances should a child's inability to read by age "ten-plus" be attributed to dullness. Surely "specific learning disabilities" used so often is a euphemism for this dullness? Professor Elkhonon Goldberg in his book "The Executive Brain" (Oxford University Press, 2001, p169) states "ADD has become a social phenomenon . . . removes the guilt . . . the sense of responsibility . . offers a convenient way of unburdening the responsibilities for life's failure." I believe many cases of dyslexia and ADD are covering the sins of poor teaching methods.

In the light of the explosion of disorders in the classroom, previously unencountered to this level, the final comment should come from the ABC's "Discovering Psychology" presented by Professor Phillip Zimbardo. He stated

People genetically primed for a disorder are more likely to get it that the general population, but only if they are also under prolonged and intense psychological stress. Genetic predisposition affects hormones and functioning of the brain but psycho-social stresses determine whether the disorder will actually surface.

The brain is an electro-chemical factory. When we upset the balance we create unknown problems. The child who is constantly asked to "read" both at school and at home (before any skills for reading have been taught) must panic. This produces adrenalin, which promotes the instinct to fight or flight. The child can do neither and the constant adrenalin produces gluco-cortocoids which affect the cells of the hippocampus, essential for memory. A catch 22 – their stress makes it difficult to learn, their lack of learning creates further stress.

This submission cannot give space to explaining yet another vital component of learning, that of myelinization of fibres of brain cells that contributes to the complexity of the learning process and the function of memory – indeed of all the functions of the brain. Nor is there space to try to explain how modern "teaching" methods do not help develop the frontal lobes of the brain. The importance of these lobes in the planning process and for exercising control over behaviour has not yet fully been explored.

Any problem that concerns the brain is serious and should be given top priority. In the 1940s and 1950s comparatively little was known, but children learned to read because what was known, and what had been proven successful, prevailed in all areas of teaching. This is not so today. Adults advanced thinking, and their inability from that level to see the comparatively simpler functioning of the brain of a child, has entered infant teaching causing substantial damage.

As members of this enquiry you have the opportunity to put things to rights for children who are ironically being abused in the most subtle way, when education is being made to be "fun".