In 1986 the US Congress contracted Marilyn Adams to write a book about the critical elements in teaching beginning reading. Her book, "Beginning to read: Thinking and learning about print" (1990), is a milestone in that it synthesizes from a variety of fields research which impinges on reading development. These research areas include education, psychology, linguistics, neurology and physiology. When in such an exhaustive review she is moved to write, "To my mind the discovery and documentation of the importance of phonemic awareness .... is the single most powerful advance in the science and pedagogy of reading this century", one might expect educators to be curious at least. Sadly, decisions about education have rarely been informed by research. Much educational policy has been either faddist, or based on broad philosophical principles. The programs derived from these origins are rarely subjected to serious evaluation either prior, or subsequent, to their implementation.

In an earlier article (The Age, 11-10-94), I was critical of the philosophy of teaching known as whole language. Whole language is based on a range of assumptions several of which are demonstrably false. It hinders the reading development of at-risk students, and is inadequate as a stand-alone approach for ensuring reading development in our students. There is, in principle, no reason why a whole language program could not incorporate fail-safe techniques to ensure the progress of at-risk students. Pragmatic teachers probably already do so, but those whose views are driven purely by philosophical considerations rather than by practices with good theoretical and empirical support cannot countenance a model which draws the best from all beneficial sources. Such intransigence fuelled by some teacher training institutions and consultants makes difficult the incorporation of research findings into classroom practice. Until the last 10-15 years it could be argued that much research was too far removed from the classroom to be either readily implemented, or even useful. There are now programs which have been successful in carefully evaluated classroom interventions with long term follow-up. They are particularly successful with at-risk students, but are also beneficial for those students who might be considered below average, but not at-risk

The programs emphasize phonemic awareness - either prior to the introduction of reading instruction, and/or integrated with a reading program. This emphasis is based on the finding that most individuals with problems in reading have difficulty understanding that words are made up of sounds, and that written words represent sounds by the use of letters. There are now a number of phonemic awareness programs available which assist teachers to ensure their beginning readers grasp the nature of our language structure (both oral and written). There are simple tests involving such oral activities as rhyming, blending and segmenting which can be used to screen for reading problems prior to the beginning of reading instruction. Early intervention in kinder or prep. can preclude the debilitating effects of early failure for many students. Thus the necessity for heavy investment in remedial programs such as Reading Recovery could be markedly reduced. It is estimated that on average 16% of our students could be classified as reading disabled. With early phonemic awareness intervention this could be reduced to a figure below 10%. perhaps approaching 4% which is the generally recognised figure for acute phonological processing deficit (dyslexia). Such children can be recognized by (i) good oral comprehension skills discrepant with their poor comprehension of written text (ii) in beginning reading, their resistance to phonemic awareness training (iii) often, family history (iv) sometimes, problems in encoding or retrieving sounds-based information from their memory. Dyslexia still represents a major instructional hurdle, but the agreement that for most students the deficit lies in the area of phonological processing is a signpost for the direction of future research.

Phonemic awareness allows students to view the reading process as rule-governed (despite irritating exceptions) and not simply arbitrary. It is an awareness which develops from tacit to explicit as students are taught to temporarily set aside the meaning of words and sentences in order to focus on their structure. It develops from simple to complex: from recognition that two words rhyme; through breaking up words into bits(icecream to ice---cream), or re-constructing words from bits(fire---man to fireman); to manipulating single sounds (such as: What word do I have if I take the |t| out of "stand"?).
Phonemic awareness is now recognised as a critical hurdle to successful beginning reading. Attention to it can reduce failure at this early stage; however, it is not a panacea. Best results have been achieved when such emphasis is integrated into the reading program. It is the teacher's responsibility to ensure that the language analysis skills developed in the oral domain are generalized to reading and spelling.

This involves the direct and systematic teaching of letter-sound correspondences, and of blending and segmenting. For children who do not learn quickly an emphasis on sufficient guided and independent practice is a crucial requirement, often neglected. Until reading skills are well advanced, controlled vocabulary texts provide for the integration of new skills into the reading of connected text. For these students, providing only uncontrolled text (no matter how authentic) rarely supplies sufficient practice opportunities for newly taught skills, and hence the skills wither. Automaticity is the desired outcome of practice. It allows the recategorization of a word, which formerly had to be broken down into bits in order to be read, into a unit recognized in its entirety, effortlessly and accurately. In addition, automaticity enables precious cognitive resources to be devoted to the critical task of comprehension rather than squandered on mechanical decoding processes. How much practice is sufficient? This varies dramatically, and slow learning and dyslexic children may need enormous amounts of practice. If this is not recognized, insufficient time may be allocated to the reading task as part of the curriculum; in addition, impatience due to slow progress may lead to the premature discontinuance of appropriate strategies.

Leaving aside philosophical objections, there is no reason why such emphases could not form part of an integrated whole language program. Research has shown that all children of at least low average intellectual ability can be taught to read if we have the strategies and the will. Reading failure is currently guaranteed by the system of teaching we have adopted. Should we accept it, like unemployment, as a cost to certain individuals of a system which is adequate for the majority? In the case of reading the outcome of enhanced teaching would probably be cost-neutral or better, as the load on expensive remedial programs would be reduced. How should we cost the personal pain of failure at the first real task expected of students at school; at the dropout rate of children who endured early reading failure ("Failure patterns set at early age: study", The Age 30-9-94); at the disproportionate levels of failure of students from poor families ("Most poor children can't read, write properly ", The Age 26-1-95)? Why don't we fix it up?