

Addressing Reading Failure at the Secondary Level: Problems and Issues

Thornbury-Darebin Secondary College
Thursday 25/10/2001

Dr Kerry Hempenstall, RMIT, Bundoora

Additional articles, resources and links at:

http://www.rmit.edu.au/staff/kerry_hempenstall

Incidence of Reading Problems in Victoria

- 1999-2000 Budget forecasted that 20% of Victorian Year 1 students would apply for Reading Recovery.
- By Year 5, only 31% of boys and 49% of girls will have reached the appropriate LAP standard.
- By Year 7, 30% of students cannot read or write properly (ACER, 2000).
- By adolescence, less than 25% of Victorian students who struggled in Year 2 had recovered (Prior, 2001)
- By Year 9, 30% of students lack basic literacy skills (ACER, 2000).
- By Year 10, the lowest 10% have made no reading gains since Year 4 (Melb Univ study - Hill, 1995).
- 39% of students do not complete school (Prof Peter Hill, *The Age*, 5/8 2000)
- 60 per cent of socially disadvantaged high school students had inadequate literacy skills (Smith Family, 1994).
- 66% of Australian employers consider that high-school leavers are not sufficiently literate to enter the workforce. Croucher, J.S. (2001, July 21). Number crunch. *The Age*, p.13.
- US surveys of adolescents and young adults with criminal records indicate that at least half have reading difficulties, and in some states the size of prisons a decade in the future is predicted by fourth grade reading failure rates (Lyon, 2001).

Why identify early?

- **Initial failure predicts future failure**

(In this study) the probability that a child who was initially a poor reader in first grade would be classified as a poor reader in the fourth grade was a depressingly high +0.88.

Juel, C. (1988). Learning to read & write: A longitudinal study of 54 children from first through fourth grades. *Journal of Educational Psychology*, 80, 437-447.

Longitudinal studies show that 74% of children who are poor readers in the third grade remain poor readers in the ninth grade.

Francis, D.J., Shaywitz, S.E., Stuebing, K.K., Shaywitz, B.A., & Fletcher, J.M. (1996). Developmental lag versus deficit models of reading disability: A longitudinal, individual growth curves analysis. *Journal of Educational Psychology*, 88, 3-17.

A Melbourne University study (Hill, 1995) has found that most struggling students show no discernible improvement in reading between Year Four and Year Ten. Few of these students have access to effective intervention, and their prognosis is grim.

Hill, P. (1995). *School effectiveness and improvement: Present realities and future possibilities*. Dean's Lecture Paper presented at Melbourne University, May 24.

Failure to develop basic reading skills by age nine predicts a lifetime of illiteracy. Unless these children receive the appropriate instruction, over 70 percent of the children entering first grade who are at risk for reading failure will continue to have reading problems into adulthood. On the other hand, the early identification of children at-risk for reading failure coupled with the provision of comprehensive early

reading interventions can reduce the percentage of children reading below the basic level in the fourth grade (e.g., 38 percent) to six percent or less.

Lyon, G.R. (2001). *Measuring success: Using assessments and accountability to raise student achievement*. Subcommittee on Education Reform Committee on Education and the Workforce U.S. House of Representatives Washington, D.C. [On Line]. Available: http://www.nrrf.org/lyon_statement3-01.htm

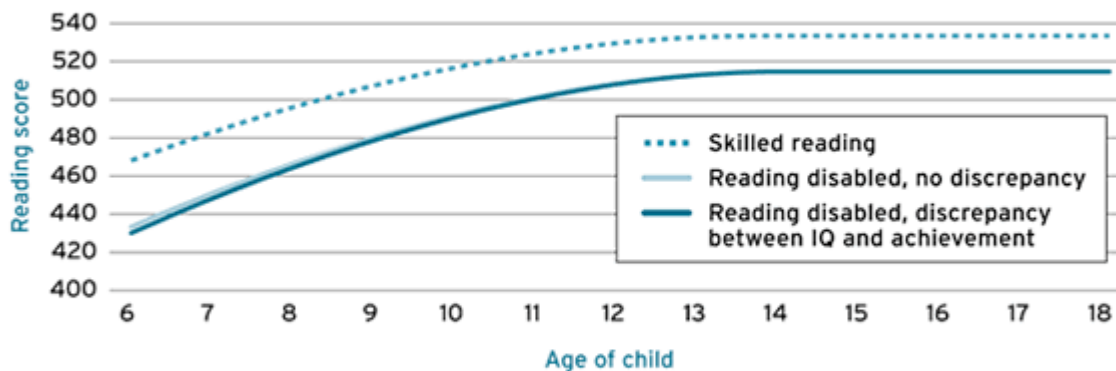
These findings extend into adolescence data previously reported on the persistence of reading disability that is, that children who were initially poor readers in the early school years remain poor readers relative to other children in the sample. This finding suggests that shortly after school entry, the reading achievement of children changes very little relative to their peers. These special services, however, consisted of eclectic approaches to teaching reading that were provided in an inconsistent fashion and for relatively brief periods.

Shaywitz, S.E., Fletcher, J.M., Holahan, J.M., Shneider, A.E., Marchione, K.E., Stuebing, K.K., Francis, D.J., Pugh, K.R., & Shaywitz, B.A. (1999). *Persistence of dyslexia: The Connecticut longitudinal study at adolescence*. *Pediatrics*, 104, 1351-1339.

Many of these older children have experienced the debilitating sequence of interacting skill deficits described by Stanovich (1986) as the Matthew effect. For example, the early lack of phonemic awareness leads to a failure to master the alphabetic principle. This further entails slow, error-prone decoding, the overuse of contextual cues, and poor comprehension. This resultant laborious, unsatisfying reading style leads students to avoid text, with a consequential reduction in vocabulary growth, and a broadening of the skill deficit. The lack of practice means fewer words can be read by sight, thereby restricting automaticity. The continued expenditure of cognitive attention on decoding leaves few resources available for comprehension, and so the student's difficulties are compounded. The longer this set of circumstances prevails, the further delayed the student becomes, the more pervasive becomes the problem, and the more difficult the rescue operation.

A Meaningless Distinction (Figure 2)

Some children with reading disabilities exhibit severe discrepancies between their IQs and achievement. Others with reading disabilities show no discrepancy; their poor reading skills correspond to low IQs. Yet their subsequent growth in reading skill is virtually identical.



The Connecticut Longitudinal Study traced three groups of children: 1) skilled readers; 2) children labeled "reading disabled" due to a discrepancy between their IQs and reading ability; and 3) those so defined due to low achievement. The data show that the reading skills of children with reading disabilities, discrepant or not, grow at the same rate and never match those of skilled peers.

SOURCE: Sally E. Shaywitz, Yale University School of Medicine. For details see www.edmattersmore.org

Many children with difficulty in learning to read develop a negative self concept within their first two years of schooling.

Chapman, J.W., Tunmer, W.E., & Prochnow, J.E. (2000). Early reading-related skills and performance, reading self-concept, and the development of academic self-concept: A longitudinal study. *Journal of Educational Psychology*, 92, 4, 703-708.

“If you identify very-high-risk poor readers (bottom 20 percent of reading ability) in kindergarten and first grade and give them effective, evidence-based instruction, at least 75 percent of this 20 percent will read (Lyon, 2000)”.

Landauer, R. (2000). Facing up to infirmities in special ed. *The Oregonian*, December 2.

- **The gap widens over time**

At best, our current efforts simply perpetuate the differences that children arrive at school with; at worst, we exaggerate these differences across the time they spend with us.

Allington, R.L. (1991). Beginning to read: A critique by literacy professionals and a response by Marilyn Jager Adams. *The Reading Teacher*, 44, p.373.

On children who use compensatory strategies such as whole word recognition or contextual strategies. "... Without accurate decoding skills, these youngsters' performance will deteriorate rapidly in the middle elementary grades, when greatly increasing demands are made on comprehension, and on the ability to recognise a large number of unfamiliar words (Chall, 1983; Mason, 1992).

Spear-Swerling, L., & Sternberg, R. J. (1994). The road not taken: An integrative theoretical model of reading disability. *Journal of Learning Disabilities*, 27, 91-103.

- **Remedies are long, slow, often unsuccessful, and student resistance can preclude success**

A study by Schiffman provides support for monitoring programs for reading disabilities in the first and second grades. In a large scale study of reading disabilities ($n = 10,000$), 82% of those diagnosed in Grades 1 or 2, 46% in Grade 3, 42% in Grade 4, and 10-15% in Grades 5-7 were brought up to Grade level.

Berninger, V.W, Thalberg, S.P., DeBruyn, I., & Smith, R. (1987). Preventing reading disabilities by assessing and remediating phonemic skills. *School Psychology Review*, 16, 554-565.

Reading achievement occurs twice as fast in first grade as it does in third grade.

Alexander, K., Entwisle, D., & Olsen, C.R. (1997). *Early schooling and inequality: Socioeconomic disparities in children's learning*. London: Falmer Press.

It takes four times as much assistance to improve a child's reading skills if help is delayed until Year Four than if it is begun in the Prep year.

Hall, S. H., & Moats, L. C. (1999). Straight talk about reading: How parents can make a difference during the early years. Chicago: Contemporary Books.

- **Reading-intelligence causal link?**

Children with reading difficulties at age 8 had lower verbal than performance IQ's; however, there was no difference at age 4.

Bishop, D. & Butterworth, G. (1980). Verbal-performance discrepancies: Relationship to both risk and specific reading retardation. *Cortex*, 16, 375-389.

Much evidence has now accumulated to indicate that reading itself is a moderately powerful determinant of vocabulary growth, verbal intelligence, and general comprehension ability. p.239

Stanovich, K.E. (1993). Does reading make you smarter? Literacy and the development of verbal intelligence. *Advances in Child Development and Behaviour*, 24, 133-180.

- **Females are currently under-identified.**

A growing body of research suggests that females experiencing learning difficulties are not identified as frequently as males.

Njiokiktjien, C. (1993). Neurological arguments for a joint developmental dysphasia-dyslexia syndrome. In A. M. Galaburda (Ed.), *Dyslexia and development: Neurobiological aspects of extra-ordinary brains*. London: Harvard University Press.

Literacy problems and older children: What focus for instruction in middle and upper primary school or secondary school?

Nationally, more than 30% of Australian children entering high school – mainly in government and Catholic schools – cannot read or write properly. (Australian Council for Educational Research). 30% of students do not complete school. (Professor Peter Hill).

Our Desperate Schools. *The Age*, 5/8/2000.

Should we be focussing on decoding or comprehension?

It is true that most reading problems can be traced back to problems of “getting the word off the page” rapidly and effortlessly; however, there are students whose general language development (in addition to their decoding) is also delayed.

In 90% of cases, the source of reading comprehension problems is poor word recognition skills (Oakhill & Garnham, 1988)

Stuart, M. (1995). Prediction and qualitative assessment of five and six-year-old children's reading: A longitudinal study. *British Journal of Educational Psychology*, 65, 287-296.

90% of these children with reading difficulties have their major problem with the development of decoding skills (Lerner, 1989). Report of the Charter G: Ad Hoc Special Committee on Persistent Reading Difficulties. <http://www.readbygrade3.com/peer.htm>

It has long been assumed that once a student is past the primary grades, phonological processing is no longer critical to word identification and to reading. Our data support the view that across the life span, from childhood to adolescence, decoding words reflects primarily, phonological, rather than orthographic coding. Such findings are consonant with what is becoming overwhelming evidence that phonological mechanisms mediate word identification in all readers, whether beginners or experienced readers.

Shaywitz, S.E., Fletcher, J.M., Holahan, J.M., Shneider, A.E., Marchione, K.E., Stuebing, K.K., Francis, D.J., Pugh, K.R., & Shaywitz, B.A. (1999). *Persistence of dyslexia: The Connecticut longitudinal study at adolescence. Pediatrics*, 104, 1351-1339.

Studies involving adults with reading difficulties have revealed marked deficits in decoding (Bear, Truax, & Barone, 1989; Bruck, 1990, 1992, 1993; Byrne & Letz, 1983; Perin, 1983; Pratt & Brady, 1988; Read & Ruyter, 1985; cited in Greenberg, Ehri, & Perin, 1997).

The adults' performance on phonologically-based tasks was worse than that reading-level matched young children, resembling those of children below 3rd grade. These findings are also consistent with those of Bruck (1992), Byrne & Letz (1983), Fawcett & Nicholson (1995), Penington, Van Orden, Smith, Green, and Haith (1990), and Pratt and Brady (1988). ... they may not have received adequate instruction in decoding and spelling to remediate the phonological deficits. p.272

Greenberg, D., Ehri, L. C., & Perin, D. (1997). Are word reading processes the same or different in adult literacy students and third-fifth graders matched for reading level? *Journal of Educational Psychology*, 89, 262-275.

When we gave this (Auditory Analysis Test) and other tests of phonemic awareness to a group of 15-year-olds in our Connecticut Longitudinal Study, the results were the same: even in high school students, phonological awareness was the best predictor of reading ability.

Shaywitz, S (No date). *Dyslexia*. [On-Line]. Available: <http://www.sciam.com/1196issue/1196shaywitz.html>

“Research suggests that teaching children to read words quickly and accurately can also increase their reading comprehension (Tan & Nicholson, 1997). The theory behind fast and accurate word reading is that good readers are very good at reading words. They have over-learned this skill through much reading practice. As a result, like skilled musicians and athletes, they have developed automaticity, as a

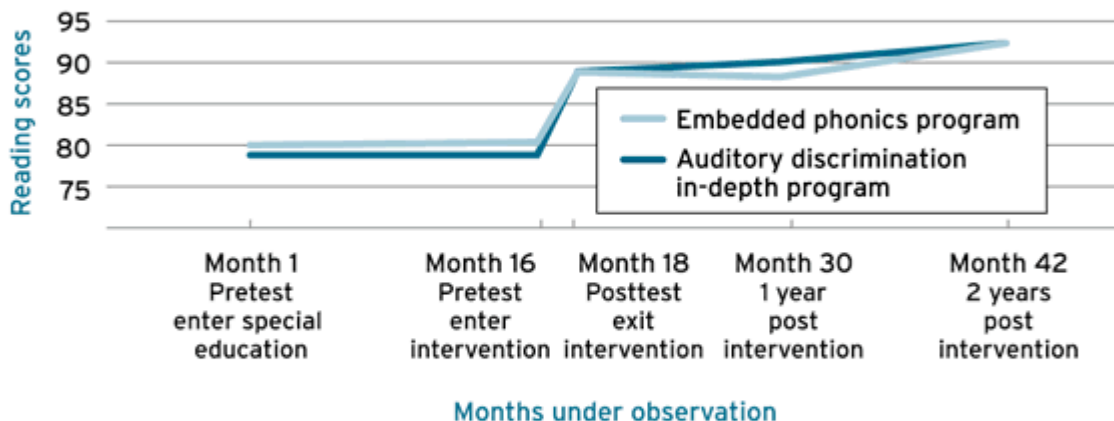
result of many hours of word reading practice. What this means is that they have over-learned word reading skills to the point where they require little or no mental effort. As a result, they are able to put all their mental energies into reading for meaning.”

G. B. Thompson & T. Nicholson (Eds.) (1998). *Learning to read: Beyond phonics and whole language*. New York: Teachers College Press.

So it's difficult to make good progress. Is it worth it?

Late Intervention: Better than Never (Figure 3)

With intensive instruction, a group of students with severe reading disabilities in grades 3–5 significantly improved their reading skills; 40 percent returned to regular-education classes. Nevertheless, their lack of reading experience left them unable to read fluently.



Florida State University researchers assigned severely disabled readers in grades 3-5 to eight weeks of intensive instruction using one of two remediation strategies. In 16 months of special education before the intervention, their performance hardly budged. The gains they made during the two months of intervention were maintained for at least two years afterward. These gains were substantial—on average, from below the 10th percentile to the 25th percentile on measures of comprehension and accuracy.

SOURCE: Joseph K. Torgeson et al., *Journal of Learning Disabilities*, 2001. For details see www.edmattersmore.org

Surely we can address all the problems at once?

The message in intervening effectively for older students is that it will take considerable time (perhaps a year or two), the chosen intervention must be very effective and efficient to increase the students' acceleration. It must be intensive – daily for about an hour. It must increase the students' free reading so as to generalise their new skills to all their reading. It must include **daily fluency activities** - as fluency is the last feature of reading to improve.

Usually these students have other deficits too – in numeracy, writing, thinking, content knowledge, problem solving. Unfortunately attempts to address all these difficulties together lead to a **dilute curriculum** in which no discernible progress occurs in any area. It is more effective to focus on the pivotal area of reading.

We found that *extended practice* was particularly important toward increasing the magnitude of treatment outcomes.

Swanson, H.L. (2001) Research on interventions for adolescents with learning disabilities: A meta-analysis of outcomes related to higher-order processing. *The Elementary School Journal*, 101, 331-348.

These findings extend into adolescence data previously reported on the persistence of reading disability that is, that children who were initially poor readers in the early school years remain poor readers relative to other children in the sample. The special services, however, consisted of eclectic approaches to teaching reading that were provided in an *inconsistent fashion and for relatively brief periods.*

Shaywitz, S.E., Fletcher, J.M., Holahan, J.M., Shneider, A.E., Marchione, K.E., Stuebing, K.K., Francis, D.J., Pugh, K.R., & Shaywitz, B.A. (1999). *Persistence of dyslexia: The Connecticut longitudinal study at adolescence. Pediatrics*, 104, 1351-1339.

The Corrective Reading program development and trialing was based on 5 lessons/week
Hanner, S., & Engelmann, S. (1984, May). Learner verification for the Corrective Reading Program. AADI Newsletter, 3-5.

Discussion with local teachers suggests that the student error count increases when lesson frequency drops from 5 to 4 lessons per week, and very significantly when lesson frequency drops from 4 to 3 times per week. (Hempenstall, 2001)

Effective programs make highly effective use of instructional time and provide multiple reading opportunities.

Schacter J. (1999). *Reading programs that work: A review of programs for Pre-Kindergarten to 4th Grade*. [On-Line]. Available at:
http://www.mff.org/edtech/publication.taf?_function=detail&Content_uid1=279

Best results are generally achieved by providing instruction every day, rather than lengthy periods with days between sessions.

Horowitz, J. (2000). Teaching older nonreaders how to read *The Reading Teacher*, 54, 24-26.

The National Literacy Strategy (1998) involves a daily "literacy hour" to attempt to address the problem of reading failure.

Department for Education and Employment. (1998). *The National Literacy Strategy: Framework for Teaching*. London: Crown.

If reading assistance fails to exert a significant impact on the reading performance of low-achieving older readers one reason is that the instruction provided is not sufficiently intense.

National Institute of Child Health and Human Development (2000). *National Reading Panel: Teaching children to read*. [On-Line]. Available: <http://www.nationalreadingpanel.org>.

We found that extended practice was particularly important toward increasing the magnitude of treatment outcomes.

Swanson, H.L. (2001) Research on interventions for adolescents with learning disabilities: A meta-analysis of outcomes related to higher-order processing. *The Elementary School Journal*, 101, 331-348.

Their instructional needs appear to include more intensive practice ... further breakdown of the phonological tasks given in training, and longer duration.

Wong, B.Y.L. (2001). Commentary: Pointers for literacy instruction from educational technology and research on writing instruction. *The Elementary School Journal*, 101, 359-369.

What do new brain imaging techniques tell us?

Employing proton echo-planar spectroscopic imaging" (PEPSI), researchers showed that dyslexic and control children differ in brain lactate metabolism when performing language tasks, but do not differ in non-language auditory tasks. The dyslexic students expend between 4 and 5 times the energy as controls for the same phonological tasks in the left anterior, or frontal, lobe of the brain.

Richards et al. (1999). Dyslexic children have abnormal brain lactate response to reading-related language tasks. *American Journal of Neuroradiology*, 20, 1393-1398.

The boys were taught to analyze sound in spoken words, to attach sounds to letters automatically and to use phonological strategies for translating written words into spoken words. Following treatment, brain lactate elevation was not significantly different from controls. They made significant gains in analyzing sounds needed to decode words and in sounding out unknown words. After the workshop all but one of the boys could read grade appropriate passages.

Richards, et al. (2000). The effects of a phonologically-driven treatment for dyslexia on lactate levels as measured by Proton MRSI. *American Journal of Neuroradiology*, 21, 916-922. [On-Line]. Available: <http://faculty.washington.edu/toddr/dyslexic2.htm>

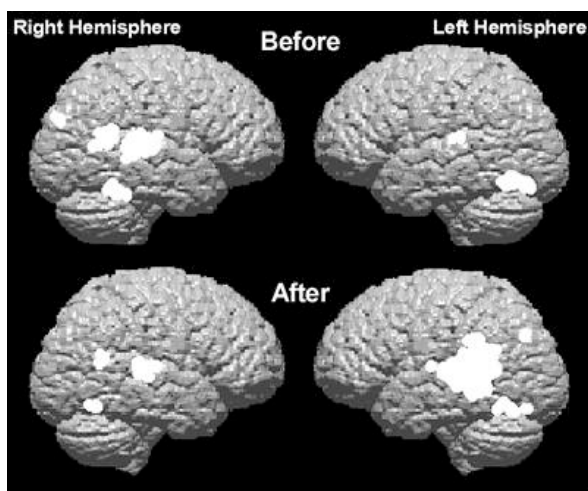
Cutting-edge federal studies using functional magnetic resonance imaging (MRI) show "clear brain differences" between dyslexic and good readers by age 6, Lyon says. As kids are taught with state-of-the-art techniques and their reading improves, MRI scans show that "their brains begin to look more like the others'," Head of the NICHD, G. Reid Lyon says.

Dyslexia is a handicap throughout school years

Marilyn Elias, USA TODAY <http://www.usatoday.com/usatonline/19991207/1723076s.htm>

"Readers, asked to imagine "cat" without the "kah" sound, readily summon "at." And the MRI photographs show their brains lighting up like pinball machines. When the brain gets it, the light bulbs really do go on. Conversely, the brains of people who can't sound out words often look different on MRI pictures. There is less blood flow to the language centers of the brain and, in some cases, not much activity evident at all. But simply put, without the ability to sound out words, the brain is stumped."

Lally, K. & Price, D.M. (1997). The brain reads sound by sound: 1997 SDX Awards. The Sun. On-Line at: <http://www.sunspot.net/readingby9/initial.shtml>



Note the left hemisphere before and after structured intensive teaching – 60 hours instruction.

Lyon, G.R., & Fletcher, J.M. (2001, Summer). Early warning systems. *Education Matters*, 22-29. [On-Line]. Available: <http://www.edmatters.org/20012/>

Older students: Why are so many struggling students not noticed until about Year Four and beyond?

At about Year Four, there is a marked increase in the number of children referred for reading assistance (Chall, Jacobs, & Baldwin, 1990). This may represent the dawning of teachers' recognition that the maturational delay hypothesis can no longer

be used to explain the lack of reading progress. More salient perhaps is the generally unacknowledged explosion of new words in textbooks at about that time (Carnine, 1982) and of the increased complexity of the words in those texts (Henry, 1991). Many students who have relied upon whole-word memory recognition as their mode for storage and retrieval find the strategy collapses in Year Four. Whereas a word recognition capacity of 400 words is adequate for coping with text up to this time (and many children's visual memory can manage such a load), the demand increases dramatically to about 4000 words around that year, and up to 7000 words by Year Six (Carnine, 1982), what Share (1995) describes as an "orthographic avalanche" (p.17).

For the student who relies primarily on word shape, the task is similar to that required in visually memorizing 7000 telephone numbers. In those languages that do rely on images rather than an alphabet for their construction, the number of words that are typically employed in print is far less than in English. For example, Chinese adults are said to have a working familiarity with only about 4000-5000 (Adams, 1990). Students who cannot access the phonological route to identify the escalating array of new words obviously struggle, and progress grinds to a halt. In truth, they had difficulties before this time, but perhaps managed to disguise them in classrooms where careful continuous assessment of word attack skills was unavailable. Unfortunately, this under-identification appears to be even more likely for girls, as their rate of referral for assistance (about 1 in every 4 referrals) does not match the prevalence (about equal with males) of reading problems among females in our society (Alexander, Gray, & Lyon, 1993).

A low *Woodcock*: Word Attack score suggests this scenario in students at (or beyond) Year Four. For younger students it is predictive of their reading future. Inability to decode pseudo-words is indicative of the need for an intensive, carefully designed program that provides at least a reasonable opportunity for the accelerated progress needed if a student is to make headway against his peers. If a student is two years behind his peers he must

develop in reading at a rate twice as fast as they do, if he is to catch them by the end of primary school (as they will improve by at least two years over that period). While this conception of reading progress is rather crude it does give the flavour of just how immense a task it is. It also helps explain the chilling finding from a Melbourne University study (Hill, 1995), that for most students in this position there is no discernible improvement in reading between Year Four and Year Ten. Most students do not have access to intervention, and their prognosis is grim. For those students who do receive help it is incumbent upon us to provide the best and most efficient intervention available at the time. This implies that the most salient content must be delivered to students in the most effective manner possible.

The Corrective Reading Program

The CRP is a remedial reading program designed for students in Year 3 and above. It comprises two strands. Decoding and Comprehension, and within these strands are a number of levels. The Decoding strand was the focus of this study, having 4 levels (A, B1, B2, C) corresponding to the students' decoding capacity assessed with a placement test. Its content and instructional methods are consistent with the findings of the National Reading Panel,

The Corrective Reading Program has been evaluated on many occasions (both the 1978 and 1988 editions), though its effects on phonological processes have not yet been a focus. Most analyses have emphasised word recognition and reading comprehension as outcome variables, and results for a wide range of poor readers have been strong. Studies have noted positive outcomes for learning disabled students (Holdsworth, 1984; Lloyd, Epstein, & Cullinan, 1981; Maggs & Murdoch, 1979), intellectually disabled students (Polloway & Epstein, 1986; Polloway, Epstein, Polloway, Patton, & Bell, 1986), maladjusted boys (Thorne, 1978), with secondary students (Campbell, 1983; Gregory, Hackney, & Gregory, 1982a; Gregory, Hackney, & Gregory, 1982b; Sommers, 1995), with adults (Herr, 1989), with gifted students (Noon & Maggs, 1980).

Facts About The Problem Reader (adapted from Corrective Reading Series Guide)

The Corrective Reading program series is designed to change the behaviour of the problem reader, The specific decoding tendencies of the problem reader suggest what a program must do to be effective in changing this student's behaviour.

- The problem reader makes frequent word identification errors.
- The student makes a higher percentage of mistakes when reading connected sentences than when reading words in word lists.
- Often the student reads words correctly in word lists and misidentifies the same words when they are embedded in connected sentences.
- The specific mistakes the reader makes include word omissions, word additional confusion of high-frequency words (such as *what* and *that*, *of* and *for*, *and* and *the*).
- The student also reads synonyms (saying *pretty* for *beautiful*).
- The student often guesses at words, basing the guess on the word-beginning or ending. And the student is consistently inconsistent, making a mistake on one word in a sentence and then making a different mistake when re-reading the sentence.
- The student doesn't seem to understand the relationship between the arrangement of letters in a word and the pronunciation of the word.
- Often the student is confused about the "word meaning" (a fact suggested by "synonym reading," "opposite reading," and word guessing). The strategy seems to be based on rules the student has been taught.
- The problem reader follows such advice as: *Look at the beginning of the word and take a guess; Think of what the word might mean, and Look at the general shape of the word.* The result is a complicated strategy that is often backwards: The student seems to think that to read a word one must first *understand* the word, then select the spoken word that corresponds to that understanding.
- Although the problem reader may use a strategy that is *meaning based*, the reader is often pre-empted from comprehending passages. The reason is that the student doesn't read a passage with the degree of accuracy needed to understand what the passage actually says. (Omitting the word not from one sentence changes the meaning dramatically.)

- Furthermore, the student's reading rate is often inadequate, making it difficult for the student to remember the various details of the passage, even if they were decoded accurately. Often the problem reader doesn't have an effective reading

In the Corrective Reading program, the student receives daily practice in oral reading, with immediate feedback.

(Only through oral reading can we discover what the student is actually reading.)

The student reads word lists with information about how to pronounce various letter combinations (such as *th* and *or*). The student also reads sentences and passages composed of words that have been taught. The sentences and passages are designed so they are relatively easy if the student approaches words as entities that are to be analyzed according to the arrangement of letters, but difficult if the student guesses on the basis of the context or syntax of the sentence. (The sentences are designed so that guesses often lead to mis-identification of the word.)

The mastery tests and checkouts in the series assure that the student observes progress in reading rate and reading accuracy. The series presents comprehension items in a way that demonstrates the relationship between what is decoded and how it is to be understood. Initially, the comprehension activities are deliberately separated from the decoding activities so that the student's misconceptions about reading are not exaggerated. The comprehension activities, however, show the student that what is read is to be understood.

Finally, the series addresses the problem reader's poor self-image. The series is designed so the student can succeed on real reading tasks. Furthermore, a point system that is based on realistic performance goals assures that the reader who tries will succeed and will receive reinforcement for improved performance.

The poor reader is not a highly motivated student. For this student, reading has been punishing. The student often professes indifference: "I don't care if I can read or not." But the student's behaviour gives strong suggestions that the student cares a great deal. The student's ineffective reading strategies and negative attitudes about reading become more ingrained as the reader gets older. To overcome them requires a very careful program, one that systematically replaces the strategies with new ones and that provides lots and lots of practice.

The problems

An effective corrective reading program must address the specific needs of the problem reader.

1. The learner must learn to look at the order of letters in a word and learn that this order suggests the general *pronunciation* of the word. Furthermore, the student must learn that the game is simple: First figure out how the letters suggest one should say the word. Then see if the word you say is one that you recognize, one that has meaning. (Note that this strategy is basically the opposite of the one the typical problem reader uses.)
2. The problem reader must receive practice in reading connected sentences that are composed of words that have been taught in isolation. Merely because the student reads words in lists does not imply transfer to written sentences.
3. The student must receive strong reinforcement for working on reading because the task is very difficult and frustrating for the student. The student has received a great deal of evidence that reading is a puzzle that can't seem to be solved.
4. Finally, the student must receive practice in reading a variety of passages. If the student practises reading only narrative passages, the student will not "automatically" transfer the reading skills to textbooks, articles, or other forms of expository writing. Therefore, different styles must be introduced.

The **Corrective Reading** decoding programs have successful with problem readers because they provide the careful integration, the practice, and the management details that the problem reader needs to succeed. Indeed they were field tested on thousands of students and reworked before they were published.

Selection

The placement test is administered prior to the program and consists of several passages of prose, the rate of accuracy of reading determining the program level for any given student. The test is designed to assess ability at the word level. The story text is not amenable to contextual strategies, and the assessment criteria of rate and accuracy make it difficult for other than skilled decoders to pass unscathed. In the author's experience it is capable of making the discrimination necessary to place students in any of the 4 levels (A, B1, B2, C), or to detect those whose skills are above or below the entry criteria. Used informally as a posttest measure it frequently has demonstrated that the student would now be correctly placed at the next higher level. This implies that the assessment device is closely related to the specified program objectives. It may be downloaded from http://www.sra4kids.com/teacher/reading/cr/decode/test_1.html

The placement test also ensures that student groups are relatively homogeneous in their decoding ability, and that they are neither over-challenged by the level of difficulty of the program, nor already competent at that level. The test is administered individually and takes about five to ten minutes. Detailed instructions are provided for administration and scoring.

In school settings the reading group teacher usually performs the screening. Typically the screening sample is derived from class teacher reports of students in the middle or upper primary school whose reading progress had been of concern. This teacher-identified group is then assessed with the placement test.

The possible outcomes of such assessments are:

1. the child's current decoding skill levels are below those of the lowest level of the program (Level A), and would be best addressed with a beginning reading program.
2. the child is appropriate for placement in one of the four program levels, or
3. the child has already mastered the decoding skills taught at each level, and any reading deficits are probably not in the area of decoding.

Depending on the range of Year levels included in the assessment cohort, it is possible that, meeting all the students' needs would require the provision of several of the levels, most frequently Levels A and B1. Schools then decide which group or groups they are able to supply with a program. In some cases schools decide to provide one program as a pilot, and plan subsequent programs after evaluating the first. This is a reasonable decision, but means that some of the identified students will not receive (immediate) assistance.

This decision usually causes some discomfort, and it is tempting to alter remedial direction and simply supply a little (usually ineffectual) aid to all of the identified students rather than select only a subset for the intensive program. As all of the students who fall within the Program's range are equally in need of support, the basis for selecting one group must be on grounds other than differential need. Some schools decide to provide the Level B1 program initially, because the majority of such students are in Years Five and Six. Schools which make this choice place a high value on ensuring students to not leave primary school without their receiving some measure of remedial reading assistance.

Other schools choose to offer Level A, as the majority of the eligible students arrive from Year Three and Four. These schools consider such students able to make better progress (being younger), and also will be enrolled at the school long enough to participate in further levels subsequently, if that is deemed necessary. Obviously each of these options is a compromise as it involves excluding some students in need.

In some cases this exclusion is permanent as the senior group leaves the school at the end of that year. In other schools the identified-but-not-treated group will receive assistance in the next round of programs offered by the school. All schools have been enthusiastic about extending their program involvement

supported by objective and subjective evaluation of their pilot. On only one occasion has the program been discontinued (albeit for one year), when school resources were inadequate to continue to provide the staff required.

The wait list group provided the source of the non equivalent control group students for my study. It is important for the internal validity of the study to note that the basis for selection in either the experimental or comparison group was not on the basis of greater need, but rather school values. All of the students identified were in similar need, and at each program level displayed a similar degree of reading deficit..

Program Design

There are two major features evident in the CRP. They are the emphasis on decoding skills (phonics) and the Direct Instruction approach to teaching the phonics content. It includes work on both isolated words and connected sentences, but its major emphasis is at the level of word structure. It is made clear to students that the decoding of novel words involves careful word analysis rather than partial cue or contextual guessing. Students are continually prompted to take account of all letters in a word, and become sensitised to common (and often problematic) letter groupings, for example, those beginning with combinations *st, bl, sl, fl, pl, sw, cl, tr, dr*; or ending with *nt, nd, st, ts, mp, ps, cks, ls, ms, th, er, ing, ers, y*. The sentences provided are constructed in a manner which allows few clues for contextual guessing, but provides ample opportunities to practise what has been learned in the teacher-presented word-attack segment of the lesson.

Lessons are designed to be provided in groups of up to 15 students. In this study most groups comprised about 10 students. The rationale for this reduction involved the lack experience of the teachers with the program, and the observation that in most groups of poor readers there are usually several students difficult to motivate, and maintain on task. This first hurdle is difficult for teachers used to a less directive model of teaching. Lessons are scripted, and most teachers report requiring at least 20 lessons before reasonable comfort with the approach is achieved. Teacher support is valuable in the early stages to assist in this skill development, and to preclude teacher initiated program changes which may jeopardise program success. The level of support needed varies from teacher to teacher; however, it was not possible in this study to provide the extensive model described by the program designers.

The program designers claim that the program combines the benefits of 1:1 tutoring with the effectiveness of group instruction. This is achieved by the use of choral responses prompted by various signals (a new skill for most teachers). Not only must teachers follow a script, but they must be able to reliably signal students when to respond, and then pay attention to each student's response in order to monitor skill development and teaching effectiveness. The results of this monitoring process help determine lesson pacing by controlling the amount of repetition necessary for mastery. The larger the group, the more difficult it is to continuously monitor every student's progress - thus smaller group sizes are helpful for novice program presenters. As teachers' reliance on the script diminishes, and as their signalling improves, so their adroitness at student monitoring improves and they are better able to manage larger groups.

The issues of behaviour management looms larger in secondary than primary schools, but may still present difficulties in middle and upper primary schools. Participation in the reading program involved parent, but not student consent; that is, students were not volunteers. Most schools considered the needs of the students too important to allow students the right of veto. To help motivate students whose history has made reading a non-preferred activity, the program includes a points system for each lesson segment. Most schools perceived the advantage of this system and incorporated it successfully into their plan. The potential for program disruption by a few disillusioned students was an additional reason for beginning with smaller group sizes.

Lessons typically range from 45 minutes to one hour, dependent on teacher lesson pacing. Typically pacing improves with experience, but initially some teachers were unable to complete a whole lesson in the time allotted. Program design specifies an optimum schedule of five lessons each week. This level of intensity has been found important for students with reading problems, as they tend to have difficulty retaining new skills and knowledge. For this reason, there is strong emphasis on massed practice for mastery, and spaced practice for retention. If lesson frequency falls too low, retention may be jeopardised leading to a general progress

deceleration. However not all schools are able to timetable five lessons per week, and even those which do so found competing events sometimes forced class cancellation.

The Level A program focuses attention on word structure through reviewing letter sound correspondence, and regular rhyming, blending and segmenting activities. It relates these phonemic awareness activities to the written word by initially emphasising regularly spelled words decomposable by using these skills. When this phonic approach is accepted by students as a viable (even valuable) strategy, common irregular words are introduced. In the authors' view this sequence is important to prevent the jettisoning of the generative decoding strategies because of their apparent inconsistent results if irregulars are initially encountered at the high rate common in authentic literature.

The following skills are taught in Decoding A:

Letter/sound identification; sounding-out (segmenting) orally presented words, and then *saying them fast* (blending); decoding words of varying degrees of irregularity; reading whole words *the fast way*; reading short groups of words; sentence reading; spelling. Related skills such as matching letters, and common letter groupings (such as ing, word completion (for example, rhyming), and symbol scanning are included on the student worksheets.

The basic objective in Decoding A is to teach students that there are regularly spelled words, words that are pronounced by blending the sounds of the letters in them. Once students understand that the identification of a word is related to its spelling, irregularly spelled words, such as **said** and **what**, are introduced. These words are spelled one way but pronounced in a different, irregular way. The sentence-reading exercises give students practice in reading words that are presented within a context. Usually students who qualify for this program do not understand what decoding is. This problem is magnified when they try to read sentences. Usually, their sentence-reading strategy involves guessing based on the syntax or the position of words within the sentence. For instance, they guess that the first word is **the**. The objective of the sentence-reading activities is to retrain students in how to read words in sentences.

The typical Decoding B1 lesson is divided into four major parts: Word-attack skills. Group story-reading. Individual reading checkouts. Workbook activities

Word-attack skills take up about 10 minutes of the period. Students practice pronouncing words, identifying the sounds of letters or letter combinations, and reading isolated words composed of sounds and sound combinations that have been learned by the students. Students earn points for performance in the word-attack portion of the lesson.

Group story-reading follows immediately after word-attack skills. This part of the lesson takes approximately 15 to 20 minutes. Students take turns reading aloud from their student book (storybook). Students who are not reading follow along. The stories are divided into parts. If the group reads a part within the error limit, the teacher presents specified comprehension questions for the part.

Individual reading checkouts follow the group story-reading and take about 10 minutes. Assigned pairs of students read two passages. The first is from the lesson just read by the group; the second is from preceding lesson. Each member of the pair first reads the passage from the current story, then the passage from the preceding lesson. A student can earn points for both passages. Points for the first passage are earned if the student must read the passage within a specified rate criterion and also a specified error criterion. (For instance, the student must read 85 words in one minute, with no more than two errors).

Workbook activities are presented as the last part of the lesson. Some of these activities are teacher-directed and are very important to the students' skill development. During lessons 1 through 5, students read only isolated sentences (a total of about 75-100 words). The stories begin on lesson 6 and continue on each lesson. Their length increases from about 200 words to 700 by lesson 60.

Students receive practice in comprehension skills with the following activities:

- Orally answering questions about each part of the story after reading the part within an error limit.
- Writing answers to a variety of comprehension items that require call of story events, sequencing, and characters

The daily oral reading checkouts provide each student with a lot of practice in reading connected sentences. Because the student work in pairs, the entire checkout doesn't take very long, about 10 minutes for both checkouts help students gradually develop acceptable reading rates (from 55 words per minute at the beginning of the program to 90 words per minute at the end).

The workbook activities are carefully integrated with the word-attack activities and with the stories that the students read. From lesson to lesson, there is a careful development of skills in the workbook. It is considered very important for the students to do the workbook activities as part of each lesson. Each worksheet is one page. The different activities provide students with practice in writing sounds copying, answering comprehension questions, spelling and transforming words. Many of the activities deal with word details because these are the details the problem reader tends to ignore.

The following activities are included in Level B word-attack skills.

- Pronouncing words with consonant blends (**slam, cast, flip**), orally constructing words with endings (adding ed to **show** to pronounce **showed**), and identifying the component sounds of orally presented words.
- Identifying the long and short sounds of the vowels **o, e, a, and I**.
- Identifying the sounds of consonants.
- Identifying the sounds of letter combinations (**th, ee, sh, or, ol, ch, wh, ing, er, oo, ea, oa, ai, ou, ar, oul, ir, igh, al**) and reading words with those combinations.
- Reading lists of regularly spelled words, such as **mat** and trip, and irregularly spelled words, such as **what** and **said**.
- Reading words that contain difficult consonant blends (**drop, splash, slip**).
- Reading words with endings (**dropping, rested**)
- Reading silent-e words (save, times, hoped).
- Reading compound words (**herself, anybody**).
- Practicing patterns drills that demonstrate consistent phonic relationships (**big, bag, beg, bug**).

The stories in **Decoding B1** increase in length, difficulty, and interest. All stories are composed of words that have been taught in the series or words that the students can already read. After new words and word types are introduced in the word-attack activities, the words are incorporated in stories. Furthermore, the introduction of words in stories is cumulative, which means that once words have been introduced, they recur in the stories.

The syntax and structure of the stories are designed for the problem decoder and are designed to correct the mistakes the reader typically makes. Early stories are "low interest" stories because the poor reader must concentrate on a new game - looking at words and identifying them without guessing. With higher interest stories, the reader becomes preoccupied with the content of the story and reverts to habitual, inappropriate decoding strategies, which means that errors increase greatly. Later in the program, after students have practised the game of accurate decoding, the stories become more interesting. Appropriate strategies are now strong enough to be continued under the pressure of more complex language and syntax.

The Corrective Reading Program is often chosen as the intervention program for the RMIT Psychology Clinic because of my experience with it, and its record of success in improving the reading outcomes for children at-risk. This has been noted in the empirical studies available in the research literature, and also in the regular evaluations I perform in schools and in the Clinic. At the Clinic we also train parents to provide the program to individual students.

CRP Decoding Gains: Approximately one grade level in 65 lessons.

Level A - early 1st Year to early 2nd
(Start Rate 45 wpm - End Rate 60 wpm)

Level B1 - early 2nd Year to end of 2nd
(Start Rate 60 wpm - End Rate 90 wpm)

Level B2 - early 3rd Year to end of 3rd
(Start Rate 90 wpm - End Rate 120 wpm)

Level C1 - early 4th Year to end of 4th
(Start Rate 100 wpm - End Rate 120 wpm)

Level C2 - early 5th Year to end of 5th.
(Start Rate 120 wpm - End Rate 130 wpm)

Establishing programs

For secondary level programs, students are often assessed in their final year of primary school and those considered at risk (i.e., are expected to have difficulty with secondary text books) are offered assistance through the Reading Program in place of their English Program or their LOTE program, or simply every day for period X regardless of what the timetable indicates. For other subjects they are part of the regular program. There are costs and benefits to each approach. However careful evaluations of the Corrective Reading program over the years have consistently demonstrated the success of the approach. The evaluations often includes formal pre and post testing, parent questionnaires and teacher comments. It has been generally accepted by school communities that the benefits have outweighed the costs.

After the initial whole class screen (often with a group test like the Progressive Achievement Test, ACER), those seen as at risk are provided with the Corrective Reading program Placement Test. For any given student, the possible outcomes of such assessments are:

1. the student's current decoding skill levels are below those of the lowest level of the program (Level A), and would be best addressed with a beginning reading program, such as "100 Lessons".
2. the student is appropriate for placement in one of the four program levels, or
3. the student has already mastered the decoding skills taught at each level, and any reading deficits are probably not in the area of decoding.

Their average reading retardation of students coming arriving at secondary school with reading problems is about 3 years and it is unlikely that will they have independence after completing Level B – though it does allow them to (a) more readily decode unfamiliar words than previously and (b) develop good automatic recognition of irregular words. One of the desired outcomes of Level C is improved ability to manage texts from other subjects, and to cope with the large number of irregular and technical words they are increasingly required to address.

It should be remembered that the Decoding B & C programs focus primarily on students who have lacked word attack skills - who have read so haltingly and so inaccurately that they were prevented from comprehending what they read. While their word attack skills after Level C would then be adequate for comprehension, many of the students still lack basic word knowledge and so may not show good comprehension of orally presented or written material. They are then in a position to improve in those areas through the regular English program, through encouragement for them to read a wide range of literature (from trucking magazines to classics) and through an awareness by subject teachers that these students continue to have needs in the area of comprehension, spelling, syntax, and expressive writing skills.

Where to for these students?

An issue for schools is whether to continue upon completion of one program level for any given group. Some schools consider that all needy children should have an opportunity to participate; whereas, others prefer to follow the same cohort through several levels. The issue is a vexed one when resources are insufficient to meet the longer term needs of all the students. Felton (1993) made the point that, for disabled learners, several years of Direct Instruction may be necessary before they are able to make adequate progress in reading without requiring additional educational assistance. This is particularly so for secondary students

who have a long history of failure, and whose reading problems have impaired their vocabulary development compared to that of their peers.

One measure which may assist schools in determining which students should be in the *continuers* group involves consideration of reading volume. The students who participate in the program are likely to have done much less reading than their more facile peers, and evidence as to any increase in the volume of reading undertaken by the students may be valuable. Stanovich (1986) pointed to the effect of volume of reading on reading progress, and it may be that a mediating variable between program conclusion and the need for further intervention resides in the amount of reading subsequently performed. The likelihood of students reverting to poor reading strategies is unknown, but is a hazard when an intervention does not include a longitudinal component. It is possible for students to develop strong word attack strategies and to make progress in reading generally, but for such skills to have little or no impact on day to day reading, or to lose its impact after program completion.

It is for this reason that the continuous within-program tests of rate and accuracy should be important elements in the overall evaluation of program success. There are clear behavioural objectives to be achieved by the end of the program. For example, by the end of Level A students are expected to be reading the daily stories and regular mastery tests at a rate of 60 words per minute at a specified error rate, and for Level B1, 90 words per minute. It is not possible to meet those speed and accuracy criteria if the reader adopts contextual cues, partial word cues, or word shape analysis strategies. Thus, the program does prompt the practice of effective reading strategies. These may be strengthened by within-school and home-based programs designed to promote and monitor increased reading volume in the post-program period. Regular subsequent assessment could be used to ascertain the degree to which student progress in reading can be achieved independently for any given student. Some students may have reached the independence level (self-teaching) described by Share (1995); whereas the progress of other students may stall, indicating the need for a further program level.

So what are the issues in reading comprehension?

Evidence indicates that, in order to be able to read, children must be able to decode text, translating it into a speech form, but children must also be able to understand spoken language if they are to understand what they decode.

From the results of the National Reading Panel, at: <http://www.nichd.nih.gov/publications/nrp/report.htm>

Comprehension has come to be viewed as “the essence of reading ”(Durkin, 1993). This knowledge a reader brings with him enables the reader to make meaning of the text, to form memory representations of these meanings, and to use them to communicate with others information about what was read.

Readers normally acquire strategies for active comprehension informally. Comprehension strategies are specific procedures that guide students to become aware of how well they are comprehending as they attempt to read and write. Explicit or formal instruction on these strategies is believed to lead to improvement in text understanding and information use. Instruction in comprehension strategies is carried out by a classroom teacher who demonstrates, models, or guides the reader on their acquisition and use. When these procedures have been acquired, the reader becomes independent of the teacher. Using them, the reader can effectively interact with the text without assistance. Readers who are not explicitly taught these procedures are unlikely to learn, develop, or use them spontaneously.

Cognitive Strategies for Improving Reading Comprehension

Comprehension strategies are procedures that guide students as they attempt to read and write. For example, a reader may be taught to generate questions about the text as it is read. These questions are of the why, what, how, when, or where-variety; and by generating and trying to answer them, the reader processes the text more actively. The value of cognitive strategies in comprehension instruction is, first, their usefulness in the development of instructional procedures, and second, the learning of these procedures by students as an aid in their reading and learning, independent of the teacher.

Typically, instruction of cognitive strategies employed during reading consists of:

1. The development of an awareness and understanding of the reader ' own cognitive processes that are amenable to instruction and learning
2. A teacher guiding the reader or modeling for the reader the actions that the reader can take to enhance the comprehension processes used during reading
3. The reader practising those strategies with the teacher assisting until the reader achieves a gradual internalization and independent mastery of those processes (Palinscar & Brown, 1984; Paris & Oka, 1986; Pressley et al., 1994).

Durkin 's (1979) highly cited observational studies of reading instruction in grade 4 showed that most teachers, in fact, spent little time on comprehension instruction. Only 20 minutes of comprehension instruction was observed in 4,469 minutes of reading instruction. This lack was echoed by Duffy, Lanier, and Roehler (1980). They described teachers as spending time in assigning activities, supervising and monitoring students as to being on task, directing recitation sessions as a way of assessing what the students were doing, and providing corrective feedback when the students erred. The teachers did not teach or show the students' skills, strategies, or processes that they could use in reading to comprehend what they read and to be successful in learning information in the text.

The Panel identified 453 studies on comprehension, of which 203 were methodologically acceptable. The seven individual strategies that appear to be effective and most promising for classroom instruction are (in alphabetical order) comprehension monitoring, cooperative learning, graphic and semantic organizers including story maps, question answering, question generation, and summarization. In addition, many of these strategies have also been effectively used in the category "multiple strategy," where readers and teachers interact over texts.

"Becoming an effective transactional strategies instruction teacher takes several years" (Brown et al., 1996, p. 20). "The data suggests that students at all skill levels would benefit from being taught these strategies" (Rosenshine, Meister, & Chapman, 1996, p. 201). The past 2 decades of research appear to support the enthusiastic advocacy of instruction of reading strategies expressed in the above quotations. The Panel ' review of the literature indicates that there has been an extensive effort to identify reading comprehension strategies that can be taught to students to increase their comprehension and memory for text.

The instruction of cognitive strategies improves reading comprehension in readers with a range of abilities.

This improvement occurs when teachers demonstrate, explain, model, and implement interaction with students in teaching them how to comprehend a text. In studies involving even a few hours of preparation, instructors taught students who were poor readers but adequate decoders to apply various strategies to expository texts in reading groups, with a teacher demonstrating, guiding, or modeling the strategies, and with teacher scaffolding (e. g., Palinscar & Brown, 1984; see Rosenshine, Meister, & Chapman, 1996 for a review). Such instruction is consistent with socially mediated learning theory (Pressley & McCormick, 1995; Vygotsky, 1978).

Students using these strategies, even in limited ways, produced noticeable improvement in the use of the instructed strategies, albeit with only modest improvement on standardized reading tests (Rosenshine & Meister, 1994). More intensive instruction and modeling have been more successful in improving reading and standardized test scores (Bereiter & Bird, 1985; Block, 1993; Brown et al., 1996).

Many of the studies involve teaching one group of students a particular cognitive strategy to use while reading. These studies show that readers can learn a strategy and use it effectively in improving their comprehension. Reading, however, requires the coordinated and flexible use of several different kinds of strategies. Considerable success has been found in improving comprehension by instructing students on the use of more than one strategy during the course of reading. Skilled reading involves an ongoing adaptation of multiple cognitive processes. Becoming an independent, self-regulated, thinking reader is a goal that can be achieved through instruction of text comprehension (Brown et al., 1996).

How well has the knowledge gleaned from research filtered into the classroom to impact teachers actual practice? In spite of apparent effectiveness, teachers may not be using effective comprehension instruction strategies without having themselves had preparation in instruction (Anderson, 1992; Bramlett, 1994; Brown, 1996; Duffy, 1993; Durkin, 1979; Pressley, Johnson, Symons, McGoldrick, & Kurita, 1989; Pressley, 1998; Reutzel and Cooter, 1988)

Durkin (1981) observed that when comprehension skill instruction is present, in many classrooms teachers appear to be “mentioning” a skill to students and “assigning” it to them rather than employing the effective instruction modeling and transactional practices that research supports (Durkin, 1981; Reutzel & Cotter, 1988). In the United States, reading from basal reading series accounts for 75% to 90% of classroom reading instruction time (Franklin et al., 1992). Although some basal teachers’ manuals do provide more evaluative comprehension skill lessons, these lessons are usually not instructional and offer little structure and rationale for helping teachers give effective skill instruction (Reutzel & Cotter, 1988). In general, students were provided with opportunities to practice comprehension strategies, but were not actually taught the strategies themselves nor the utility value of applying them. (Pressley, 1998, p. 198).

Who are the students who have serious problems in comprehension strategies?

They are the students who struggle with most aspects of their schooling. Their problems are usually not confined to reading. They do not follow instructions. They have a poor memory for information. They struggle to repeat sentences. They don’t understand or employ logic in arguments. Their vocabulary is limited. Motivation is not their strength.

Advanced Skills for School Success

Archer, A. & Gleason, M. (1994). Advanced Skills for School Success. Australia: Hawker-Brownlow. It is set out in DI format (scripted teacher's book and consumable workbooks), is cheap (about \$25 per level for teachers book and \$3 per student book), and I've found it invaluable for disorganised students generally and LD students in particular. However, implementation as a whole school program would make life easier for both teachers and students. It covers not only organisational skills but very useful metacognitive routines for a range of potentially troublesome activities - such as: completing assignments, memorising information, answering chapter questions, proofreading assignments, previewing chapter content, reading expository materials, taking notes on written materials, taking notes on lectures.

School Behaviours and Organisation Skills

Module 1—Years 7-8

Introduces school behaviours and management skills for before, during and after class. Includes –

- organising materials before class;
- organising folders;
- dividing assignments into tasks;
- planning homework;
- writing an action list; and completing homework.

Teacher Guides feature

- Procedures to promote immediate generalisation of skills;
- Review Lessons—for skills reinforcement;
- Post-Test—to provide review and feedback on student progress;
- Follow-up activities to promote continuous use of skills; and
- Reproducibles—parent letters, checklists, reference sheets, class posters and review materials.
- Student Response Books provide the stimulus used in each of the introductory lessons

Completing Daily Assignments

Module 2—Years 8-9.

Students learn strategies for producing neat, well-organised, legible written work. Includes:

- styles of presentation;
- planning assignments;
- answering written questions;
- proofreading; and reading information and
- checking for understanding.

Effective Reading of Textbooks

Module 3—Years 9-10.

- The reading of expository material is the essential method for students to learn new information. Includes: introduction to strategies;
- active reading (determining topic and important details);
- indentation note-taking;
- mind mapping written material; and
- writing a summary paragraph.

Learning from Verbal Presentations and Participating in Discussions

Module 4—Years 11-12. Students develop skills crucial for future study or work.

Includes:

- taking notes in class;
- brainstorming; and
- participating in discussions.

Issues Regarding Reading Problems in Victoria

- 1999-2000 Budget forecasted that 20% of Victorian Year 1 students would apply for Reading Recovery.
- By Year 5, only 31% of boys and 49% of girls will have reached the appropriate LAP standard.
- By Year 7, 30% of students cannot read or write properly (ACER, 2000).
- By adolescence, less than 25% of Victorian students who struggled in Year 2 had recovered (Prior, 2001)
- By Year 9, 30% of students lack basic literacy skills (ACER, 2000).
- By Year 10, the lowest 10% have made no reading gains since Year 4 (Melb Univ study - Hill, 1995).
- 39% of students do not complete school (Prof Peter Hill, *The Age*, 5/8 2000)
- 60 per cent of socially disadvantaged high school students had inadequate literacy skills (Smith Family, 1994).
- 66% of Australian employers consider that high-school leavers are not sufficiently literate to enter the workforce. Croucher, J.S. (2001, July 21). Number crunch. *The Age*, p.13.
- US surveys of adolescents and young adults with criminal records indicate that at least half have reading difficulties, and in some states the size of prisons a decade in the future is predicted by fourth grade reading failure rates (Lyon, 2001).

- Why identify early? Initial failure predicts future failure
- The gap widens over time
- Remedies are long, slow, often unsuccessful, and student resistance can preclude success
- Reading-intelligence causal link?
- Females are currently under-identified.
- Should we be focussing on decoding or comprehension?
- So it's difficult to make good progress. Is it worth it?
- Surely we can address all the problems at once?
- What do new brain imaging techniques tell us?
- Why are so many struggling students not noticed until about Year Four
- Corrective Reading program: Decoding and Comprehension
- Advanced Skills for School Success