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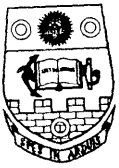

ERRATA

The authors' names and full titles of the articles appearing in ENGLISH USAGE IN SOUTHERN AFRICA, Vol. 13 of 1982, were omitted and are as follows:

1. REMINISCENCES AND THOUGHTS OF AN EDITOR - An interview with Mey Hurter

2. LANGUAGE DEVELOPMENT AND DEVELOPMENTAL READING - *P. Pienaar*

3. AUSTRALIAN ENGLISH - *W.D. Maxwell-Mahon*, University of Pretoria

4. TWO PLEASE? SPEECH DIFFERENCES BETWEEN MEN AND WOMEN IN A SIMPLE SERVICE ENCOUNTER - *Gary Barkhuizen*, Rhodes University

5. WORDS AS SOCIAL AND RELIGIOUS BOUNDARIES - *T.D. Verryn*, University of South Africa

# LANGUAGE DEVELOPMENT

## INTRODUCTION

Communication is a totality made up of a number of complementary skills – gesture, oral expression, drama, mime, reading aloud and silently, and writing in both prose and poetry – and must be studied as a unity. I do not believe that it is desirable, or possible, to teach reading in isolation, *at any stage in the individual's education*. Any reading programme, or method, which does not take account of, and incorporate, the complementary aspects of language study must be the poorer. Reading at all levels and in all its modalities should interlock with other aspects of the language study programme.

## TALKING AND READING

A child's command of language develops out of the interaction between his innate potentialities and environmental forces. He acquires language skills sequentially and progressively. Thus before he learns to read he must learn to speak intelligibly. And in order to acquire speech patterns he must have mental pictures with which he can match the words that he hears in order to understand what the words mean. Initially he acquires these mental constructs through the process of speaking and listening. Brown (1958) elaborates on the way in which children learn through parent-child dialogues: 'If a child says "doggie bite", a parent may reply, "yes he is biting", adding the auxiliary verb, is, and the progressive inflection, -ing. Both additions exemplify details of English transformation, and do so within the context of the child's own speech. Parents expand approximately 30 percent of what two-year-old children say.'

Communication is essentially a matter of transmitting and receiving, or of speaking and listening. Later the child may add to his store of constructs by seeing new words, saying them and hearing them, and then associating them either with pictures or objects which he can see, or with ideas of things which he already has. Speaking and listening are therefore vital in the beginning stages of learning to read. Without a foundation of speech patterns it is extremely difficult to acquire the more sophisticated graphic symbols of communication used in reading and writing. There are three components to language - the syntactical, the phonological, and the semantic (Postal, 1968) - and all three are acquired simultaneously to some extent because they all complement and illuminate one another. It follows that if for some reason the learner cannot take in one of these three components he will be severely handicapped in grasping the other two. The deaf child cannot hear the phonological component, while the dumb child cannot repeat what he hears. Deaf and dumb children have no sound-sense system on which to build the decoding-interpretative process that is involved in learning to read. This makes the already difficult task of learning to read (and write) infinitely more difficult.

## THE READING PROCESS

There are two parts to the reading process:
(i) physiological / perceptual and
(ii) psychological / interpretative.
When we read, we see and decode first, and interpret second. When a child learns to read he learns that certain visual symbols have certain specific sound values. He learns to associate the symbols with their sounds. According to the phonic method of teaching reading he learns the word 'cat' by breaking it up into its component sounds: 'c' says /k/, 'a' says /ae/, and 't' says /t/, so 'c-a-t' says /kaet/. Learning to read mechanically, then, is essentially an analytic-synthetic process.

As soon as the rudiments of the decoding process have been mastered, and perhaps even simultaneously, the child should be encouraged to use contextual clues to elucidate and extend the meaning of words and sentences. In other words, *meaning*, as distinct from *mechanics*, should be stressed at all times and at all stages: 'Teaching of reading should ensure that mechanical reading and comprehension develop commensurately ... An over-emphasis on mechanical reading to the detriment of comprehension ... should be avoided' (Tansley, 1967).

As the child becomes more and more familiar with the more common words, which he uses in his daily speech, he learns to recognise them instantly, and he builds speed and fluency in this way.

At the same time he should be developing his word-attack skills so that he can break down polysyllabic words. The way a 6-year old's face lights up when he successfully breaks down 'pter-o-dac-tyl' or 'bront-o-saur-us' leaves us in no doubt of the motivational value to the child of puzzling out new words, whether they be in or out of context. However, as he gains in reading experience he should use contextual clues more and more to elucidate meaning: 'Children should be encouraged to make use of context clues to "unlock" words which are difficult' (Tansley, 1967).

The beginning reading teacher should encourage intelligent guessing if it is supported by phonic knowledge. Thus if the child encounters the word 'unusual' in the following sentence, 'The policemen asked the father of the boys, and the foreman, to report to him at once anything unusual that happened on the island' (Ladybird Key Word Reading Scheme, Book 12A, 1966), and he has difficulty with it, the teacher might usefully prompt him with 'Is it "strange", Johnny?' or 'Is it "usual"?', thus leading him to work out the word from the sense of the sentence and his previous experience. Alternatively she might urge the child to read on a bit to see what the word might be, very much as we leave the most difficult words in a crossword puzzle until last so that we can glean as many pointers as possible. Just as every child rediscovers, and in a sense invents, spoken language – 'on the basis of fundamental biological characteristics ... each generation creates language anew' (McNeill, 1966) – so, too, must he be given the opportunity to go on a treasure hunt when he opens a book. The joy of discovery applies as much to reading as it does to mathematics, or any other subject.

## DETERMINANTS OF PROGRESS

The best preparation for learning to read is a happy home in which parents and siblings talk frequently and intelligently about anything under the sun, and in which books, newspapers and periodicals are read constantly. As soon as the child expresses an interest in picture books these should be supplied in abundance, and thereafter one or both parents should find time every day to read to him. In this way he will come to want to read for himself. Indeed many intelligent children do learn to read in just this informal way, even before they go to school. Motivation is the key to learning to read, as it is to learning in general.

The greater the child's language experience the better equipped he will be to tackle the reading process. Operation Headstart in America and the Plowden Report in Britain were widely publicised and enthusiastically received, and one of the reasons is that they both highlight the importance of nursery school education,

particularly for the socially disadvantaged child. One of the main functions of informal pre-school education is to provide the child with opportunities to extend his limited experience and limited language through constructive play and lively dialogue with interested, specially trained adults whom he would not normally meet in his home situation. 'Lack of appropriate language stimulation in early home and school life makes success in school activities such as reading progressively more difficult with age. Deutsch (1956) stressed the need among disadvantaged children for intensive language saturation in preschool and early school programs' (Harris, 1969). The environment in nursery schools is designed to fit the child, and carefully structured to bring him out of himself and develop him physically, intellectually, socially and emotionally.

We may well ask whether reading ability, or disability, can be inherited. Lenneberg (1967) observes: 'The familial occurrence of congenital language disability is well documented through a number of published pedigrees ... After a survey of all published cases we may well agree with Brewer's conclusion that congenital language disability is probably a dominant, sex-influenced trait with at least fair penetrance .... *Both global language-facilitation and global language-difficulties may be attributed to inherited factors.*'

It would seem therefore that verbal ability or disability, and hence reading ability or disability, may be inherited. However, both ability and disability can also be induced, and certainly aggravated, by environmental factors, and it is not always possible, or profitable, to say where nature ends and nurture begins. In a minority of cases parents may be intelligent, and good and avid readers, and yet their children may not follow in their footsteps, either because they have not inherited the same capacity, or more probably because they lack the inclination or incentive.

While there is generally a correlation between intelligence and reading attainment, there 'are always some children whose achievement in reading is much below the level that one would expect from their intelligence scores. Among the children who have been referred to the writer as complete non-readers there have been several with I.Q.'s of 115 to 125' (Harris, 1955). He goes on to say: 'The opposite finding - of reading ability substantially higher than intelligence level - is less common. Dull children do sometimes score a year higher on reading tests than on intelligence tests, and a difference of two years is rare but not impossible. Such findings are to some extent the result of errors of measurement in the tests, and are also to some extent due to unevenness in the child's mental development.' Whatever tests are used and at whatever level the teacher is operating, he should be sure in his

own mind what his charges' verbal potential is and he should aim to get them reading up to that potential.

A measure of physical and mental maturity is essential before any child can learn to read. His eyes must be able to focus together on large print and he must be old enough to hold letters and words steadily in focus while he decodes them. He must have matured sufficiently to have an attention span which will enable him to concentrate long enough to arrive at the meaning of a few simple sentences. The satisfaction of understanding a short printed message will stimulate him to make further efforts. He must be able to move his eyes steadily and in focus from left to right, with a minimum of regressions and see-sawing movements. Unco-ordinated eye movements can only lead to confused seeing and articulatory errors such as mispronunciations, substitutions (reading one word for another), refusals, additions (inserting extra words), omissions (leaving words out), and reversals (reading words backwards).

As for the vexed question of reading readiness, it is as well to remember Brutus's words:

> There is a tide in the affairs of men
> Which, taken at the flood, leads on to fortune:
> Omitted, all the voyage of their life
> Is bound in shallows and in miseries ...

*(Julius Caesar, Act IV, Scene 3)*

It is as bad to start reading too early as it is to leave it too late. Certainly, formal instruction in reading is best left to the teacher and should not commence until the child goes to school. Thereafter a great deal will depend on the quality of instruction, the method of instruction (basically phonic, or whole-word/look-and-say), the medium of instruction (traditional orthography – t.o., or i.t.a. – Initial Teaching Alphabet), time spent on reading activities, both in and out of school, and on the support given the child at home. (A child reared in a reading environment starts with a tremendous advantage, and this advantage usually compounds once formal instruction has commenced.)

The factors bearing on achievement in reading are clearly numerous and various. However, progress in beginning reading appears to depend primarily on the learner possessing the following attributes:

(i) normal vision, hearing and speech;
(ii) adequate general intelligence;
(iii) considerable language experience and an extensive spoken vocabulary;
(iv) a lively interest in words and books;
(v) abundant opportunity and encouragement to read continuously and omnivorously.

## DEVELOPMENT OF FURTHER READING SKILLS

It is essential that basic reading skills acquired in the first few years of school be practised and developed in later years lest they diminish through disuse and misuse. The teaching of reading must not cease when the child has learnt to read; in fact it should continue until he has realised his mature potential. Thus once he can read simple, meaningful material with reasonable mechanical facility - in other words, once he can read aloud connected material (as opposed to isolated words) with some expression and understanding - he is ready to embark on a developmental reading course.

A course in developmental reading is designed to promote global reading skills (accuracy, fluency, speed, vocabulary, comprehension) by moving the child continuously and sequentially through graded material so that he graduates from being dependently, functionally literate - in the main a somewhat hesitant word-by-word oral reader - to being independently, thoroughly literate - a fluent silent reader who can read with understanding and enjoyment. During this time, which for the average child extends throughout the senior primary phase at least, he develops basic reading skills through systematic intensive and extensive practice rather than through formal teaching. He should start from where he is and proceed at his own pace and according to his own expressed needs and abilities, largely instructing and correcting himself and evaluating his own performance as he goes along. During this phase the emphasis should shift progressively from reading aloud in pairs, or in small groups of homogeneous ability, to reading silently on his own. The teacher should act as a learning consultant rather than a formal instructor. He should always be there in the background to initiate activities, to answer queries, and to encourage and support, rather than in the foreground, dominating the educational stage. His rôle should shift from that of instructor to that of adviser. However, at all stages he should be vitally engaged in organising and structuring the child's

reading programme and reading environment. His rôle may change and he may seem to abdicate progressively as the child gains in strength and confidence, but he must always be there, unobtrusively guiding and shaping the child's progress.

It is during this crucial formative phase that the child, having previously learnt to read, now, in conjunction with his peers and teachers, learns to read to learn.

Developmental reading, therefore, is a process which aims to refine reading ability by increasing concentration, enlarging vocabulary, improving accuracy and comprehension, increasing speed and versatility, and deepening understanding and appreciation. A good developmental reading programme contains absorbing material and searching questions – questions which require inference and insight on the part of the reader. Instruction should be thoughtful, continuous, concerted, and sequential; it should also be individualised, and unobtrusive. Feed-back should be immediate, and exercises should be self-corrective as far as possible. The instructor-adviser should nevertheless ensure that pupils have checked correctly. Thereafter they should be encouraged to keep records of, and to evaluate, their own progress.

## DEVELOPMENTAL READING: DESCRIPTION

Developmental reading itself is not new, though many of the techniques, methods, and devices by which it is propagated are, as well as the reading exercises which make up developmental reading programmes. Once a pupil has learnt to read and write, however hesitantly and clumsily, and has achieved a reading age of about 7,0 years on a standardised word reading test, such as the Burt Rearranged Word Reading Test, the prime function of the whole language studies programme, and indeed one of the prime functions of the whole educational process, is to increase his proficiency in these two complementary skills to the point where he is thoroughly literate and articulate. His reading prowess should be developed, or furthered, to the limits of his ability. It may not always be developed in a systematic or scientific way, but it must be developed none the less. Developmental reading courses which have gained in prominence and popularity in the last three decades (such as S R A and Ward Lock multi-level reading laboratories, and E D L multi-media devices and materials) aim to achieve systematically, through carefully controlled practice on specially prepared and graded reading material, what has hitherto been achieved haphazardly, through occasional, informal, and largely unsupervised practice on all sorts of suitable and unsuitable materials. But in each case the aim is the same, to develop basic reading skills to the point where the pupil can read, aloud or

silently, with maximum efficiency and effect, and with maximum enjoyment.

Developmental reading comes into its own as a priority in the senior primary phase only because, as knowledge proliferates and the curriculum becomes increasingly crowded and diversified, it is unlikely that attention and time will be given to reading *per se* beyond the junior and senior primary phases. Therefore we must aim to achieve in three years what most American educationists believe should be a priority throughout the child's school career, at least, and if possible throughout his life: 'Reading is a developmental process which is never completely mastered. Improvements can be made in using reading as a process for learning all through life' (Braam and Sheldon, 1959).

'Although the programme has clearcut, preplanned guidelines, there is no routinised daily ritual to which all teachers adhere. Instead each teacher bases his approach largely on pupil interests ... Recognition of central thoughts and themes is emphasized as well as how to isolate important details. Locating facts, finding proof, organizing data, generalizing, interpreting meanings, imagining, predicting outcomes, and drawing conclusions are all part of the developmental reading process. Learning to skim, to use indexes, to develop precision, and avoid carelessness are important. Skill in oral reading and intelligent listening are also goals of the programme. Developmental reading procedures include the use of numerous regular and reference books as well as periodicals. Simple research ideas are formulated from pupil interests, and projects are developed at appropriate levels of difficulty' (Bottomly, 1961). Clearly, the so-called 'regular developmental reading programme' has much in common with the English studies programme, with reading as its core, in South African schools. The American model seems to differ in that it is more highly structured, more inclusive, and more pupil-centred. From the above description, too, it is clear that S R A Reading Laboratories, and devices such as the E D L tachistoscope and controlled reader, together with the materials that are projected through them, can constitute a part of the 'regular programme', but should never constitute the whole of it. Innovations such as these can usefully supplement, but not supplant, other reading materials and activities.

A good developmental reading programme aims to do far more than merely increase the rate of silent reading. Rapid reading courses, by definition, only aim to increase the speed of silent reading while maintaining comprehension at about 70 percent of correct responses to questions asked on every exercise. On the other hand, a good developmental reading programme aims to improve reading within the integrated field of English studies, which includes oral

and written expression and language study, as well as reading silently and aloud with fluency and accuracy, and with full understanding and appreciation: 'Reading must be viewed as one element in an integrated programme for language development, i.e. it must be allied to oral work, controlled and free written work, spelling and dramatic activities' (Tansley, 1967). It is also important to remember that 'the act of reading is a thinking act' (Spache, 1967), and that no useful purpose is served by increasing the rate of reading to the point where it outstrips the rate of thinking. In fact people cannot be trained to read faster than they can think.

Speed and power of reading are the two most important components of the developmental reading process. Rate of reading is self-explanatory, save perhaps that it should be stipulated that it refers to rate of silent reading in the developmental reading context. Power of reading, however, is more difficult to define. 'Comprehension refers to the ability to understand what is read ... Power in reading implies the creative ability of the reader to manipulate mentally what he has read in order to integrate it with what he already knows and thus gain insight into new relations that were not given to him in the reading *per se* ... Power of reading, then, is that aspect of reading which emphasizes reading as reasoning' (Holmes and Singer, 1966). It is obvious, then, that power and speed of reading are reciprocal to a considerable extent. Holmes and Singer report a correlation of 0,594 between them. Further, both power and speed depend on the following attributes:

(i) *intelligence*: 'As a child grows older, intelligence plays a greater rôle in determining his reading achievement ... Lennon's analysis (1950) ... found increasing correlations between reading ability and intelligence, from 0,34 for the second grade to 0,85 for the eighth grade' (Chall, 1967);

(ii) *attitude*: 'The chief contribution of experimental programmes is not so much the improvement of academic skills and acquisition of information, as it is the development of desirable attitudes' (Lindgren, 1967);

(iii) *concentration*: 'When conditions demand rapid reading with comprehension, concentration is an inevitable by-product. The habit of striving to read rapidly for information then results in a habit-formation of concentration, which in turn makes for greater speed' (Holmes and Singer, 1966); and

(iv) *background knowledge*: 'The evidence definitely shows that the greater the store of information, the easier the task becomes' (Holmes and Singer, 1966).

It is clear, therefore, that if a reader has power he will also

have speed, though the rate at which he can read, or the rate at which he chooses to read, will depend not only on his power of reading but also on his habitual attitude to reading, which may well be a function of his total personality (some people, despite their intelligence and educational advantages, are habitually slow readers), and on his specific attitude to the reading material to which he is applying himself at the time (most people elect to read autobiographical material at a slower, more thoughtful rate than they read narrative material, for example).

Certainly, motivation and application are crucial to the development of more efficient reading. For this reason any developmental reading programme that does not capture and sustain the interest and attention of the pupil is bound to fail; and the appeal of the stories or passages for comprehension is crucial in this regard. The teacher, too, has a considerable part to play in the matter of motivation. A good teacher can make a mediocre programme effective, while a bad teacher can mar a good programme; but no teacher, no matter how competent, dynamic and enthusiastic, can sustain pupil interest for five hours a week for a period of 12 - 15 weeks (which is the suggested length of many concentrated developmental reading courses) in a programme in which the passages are dull, the style stodgy, and the exercises unimaginative and repetitive.

Once a minimal functional competence has been achieved, rate of reading depends heavily upon background knowledge. Thus the more pupils read and learn, the wider will be their frame of reference, and the more they will be able to skim judiciously in order to pick up the main points and get the author's drift. On the other hand, power of reading, which is what developmental reading programmes are primarily concerned to foster, depends heavily upon readers' verbal reasoning ability, and the extent of their vocabulary.

Another important point that flows from this distinction between speed and power of reading is that the one is not significantly diminished as the other is increased. In fact just the opposite has been found to be the case: 'The use of instruments ... produced marked gains in the rate of reading with equivalent gains in comprehension' (Warren, 1962); 'Before, 258 and 242 w.p.m. and 72 percent and 79 percent comprehension; after, 397 and 331 w.p.m. and 89 percent and 85 percent comprehension' (Solan, 1967).

S.E. Taylor (1965) sounds a timely note of warning in this regard: 'People who attempt to control their eye-movement patterns find that they must concentrate so hard on trying to feel what they are doing that they lose the thread of thought.' Clearly, in the formative phases it does not do for the reader to become too self-

conscious of his behaviour during reading, and particularly of his eye-movements, lest he divide his attention between what he is reading and how he is reading it. He sounds another warning note in a later paper (1968): 'An analysis of these eye-movement photographs shows that the gain exhibited by these seemingly above-average trainees was comparatively slight, and there are suggestions that their gain in performance could be, in part, attributed to drive and motivation during testing, and that when they attempted to read "dynamically", they appeared to resort to a skimming and scanning-like process, with substantial loss in comprehension.' Improvement in speed particularly may well be effected mainly through concerted application and increased concentration, and even then gains may prove to be ephemeral in as much as they reveal themselves in a test situation only if it is similar to the practice situation. In any case, gains in speed, whether real or illusory, are worthless if they are made at the expense of comprehension, and teachers are well advised not to push their pupils prematurely, or too hard at any time, to increase their rate of reading.

## PERCEPTION AND INTERPRETATION

In the event of either visual or mental malfunction we falter in our reading and our efficiency is diminished. Both perception and interpretation are improvable: 'We see indisputable evidence that the rate gains achieved by various devices are not secured by mechanically greatly increasing the span but probably by inducing quicker perceptions' (Spache, 1960); 'The more experienced reader always attempts to organize what he sees ... The primary value of short exposure training, therefore, in reading improvement is ... to increase the accuracy and precision of perception, and to develop the reader's ability to organize perceived material more rapidly' (E.A. Taylor 1957); 'A developmental reading programme must be designed to develop, maintain, and perpetuate perceptual and basic (interpretative) reading abilities' (Solan, 1967). The limit to which these two associated aspects of the reading process are improvable is determined in large measure by the individual's visual and mental acuity.

Most of us have sufficiently good vision not to be bothered unduly in actually following with the eye lines of print on a page. However, it is important to note that a good developmental reading programme takes account of the experimental findings of optometrists and other specialists in this regard. For example, most reading material in these programmes is presented in columnar form because it has been found that people can read about 6 words in a line about 80 mm long more quickly and easily than they can read, say, 10 words in a line 100 mm long. (Fries, 1964) The

shorter lines no doubt facilitate rapid fusion on the return sweep from the end of one line to the start of the next. Most of us lose time on this return sweep because, having binocular vision, our eyes have to re-fuse after a rapid movement from right to left, and the longer this sweep the more they tend to diverge, and the more likely we are to focus at the beginning of the wrong line. This in turn leads to regressive eye movements, 'picking up the thread' again, and similar time-wasting practices.

Intelligence is crucial to the development of further reading skills. The less intelligent child is more likely to experience difficulty in learning to read, and thereafter in increasing competence in reading: 'There were children of average intelligence who were severely backward in reading at the age of 7, but the majority of such children were of low average intelligence' (Clark, 1970). Conversely, the more intelligent child usually learns to read easily, and becomes a more efficient reader.

Developmental reading courses aim to improve both perception and interpretation of the printed word, but since intelligence varies rather more than vision does when both are applied to something like reading, it may be supposed that a developmental reading course will improve the processing more than the perceiving of data. For example, tachistoscopic and controlled reader training (which are the cornerstones of the E D L philosophy and method) improve concentration – and hence performance – as much as they improve perception. It takes the average adult 1/100 sec. to perceive or read, and 1/4 sec. to interpret or recognise a word, so there is an obvious physical limit to the amount of improvement which can be effected through 'hardware' practice. A person may be able to skim at 3 000 w.p.m., but he cannot actually read at much more than 700 w.p.m. because it is physically impossible to do so. Eye-movement photography and optometric studies have proved as much: 'For even the most efficient readers, 800 w.p.m. is the practical limit for thorough and inclusive reading. This condition results from the fact that few, if any, readers have an average span of over 2,7 words while simultaneously averaging the higher speed activity of 5 eye-stops per second (2,7 words per eye-stop x 5 stops per sec. x 60 sec. = 810 w.p.m.). This is not to say that people cannot be taught to skim and scan at apparent rates of thousands of words a minute. However, eye-movement photographs taken of persons involved in skimming and scanning show that only certain lines are read, and even these may not be read in total (Grayum, 1953; Nason and McDonald, 1964; Taylor and Frackenpohl, 1961). In other words, skimming and scanning can be described as processes of looking and reading' (S.E. Taylor, 1965).

The wider a person's vocabulary the more quickly and accurately he should be able to interpret words and phrases, and hence grasp

ideas. Training in quick and accurate word recognition is therefore more important to efficient reading than training eye-movements and trying to widen perceptual span. Devices, or 'hardware', do not widen the visual span because the retina cannot be changed. So a person cannot be trained to read in phrases or groups of words. Our eyes make 90 fixations per 100 running words, reading at 300 - 400 w.p.m., so if we increase our speed we simply select some words and phrases and drop others. When we read under pressure we snatch at 'strong' words – words which carry the sense forward, generally nouns and verbs – and skip 'weak' words – words which merely embellish, or complete the syntactic and semantic structure of a prose passage. 'No studies to date have shown that training to widen span has resulted in the ability to see in phrases during continuous reading. Feinberg's study (1949) suggested that the physiological limitations of the eye will probably prevent readers from ever reaching this goal' (S.E. Taylor, 1965). The reader may be able to read three or four words in a static seeing situation when the words are flashed at him tachistoscopically in a meaningful cluster, viz. 'the jovial Mr Pickwick' (provided that he knows the word 'jovial', of course!), but this is not the way we read continuously from a page of connected prose. In the dynamic reading act impressions stream in at the rate of three to five per second, and the mind must process these impressions virtually instantaneously, and simultaneously order them in meaningful sequence – 'reading is a thoughtgetting process' (Spache, 1967). Clearly, reading from the printed page is both perceptually and interpetatively very different from reading isolated words and phrases flashed tachistoscopically.

In this regard it is worth nothing what S E Taylor, who is the originator of E D L devices and programmes, has to say about the function of instruments such as the Tach-X Tachistoscope and the controlled reader in fostering reading skills. It is emphatically not to widen eye-span, or to train fixation patterns, or to treble reading rate: 'The primary contribution of instrument techniques lies in the control they exert and the training effect that they have on the sub-skills employed by the reader. Improvements can be made in:

(i) binocular co-ordination and motility by accelerated presentations;
(ii) visual discrimination and visual memory through flashed or timed exposure;
(iii) directional attack by left-to-right presentations; and
(iv) verbal experience by the inclusion of certain comprehension-building and study approaches with the content presented during instrument training.

Unfortunately, many people still regard reading instruments as

timing or motivating devices and rarely explore the discrete training functions they offer' (S.E. Taylor, 1965).

## FLEXIBILITY/VERSATILITY

Adaptability, ability to vary the pace of reading according to the difficulty of the material, and ability to skim and scan, are some of the keys to more efficient reading. 'Remember, flexibility is the important factor in improvement, not speed alone. Flexibility in reading is considered to be that aspect of reading which causes the reader to be both adaptable and versatile' (Braam and Sheldon, 1959).

McDonald (1968) advocates training in flexibility as early as the fifth grade with those students who have mastered the fundamental processes. Certainly, flexibility should be fostered in older pupils and/or pupils of eighth grade ability, or reading ages of 12+, and in college students, but McDonald may be a little premature in aiming to train flexibility in children with no more than fifth grade, or South African Std 3, reading ability: 'Taken together, the results of these studies showed that the primary child is too immature to acquire the most advanced type of skills and that certain skills must be introduced and mastered in the middle and upper grades, at the earliest' (Bamman, 1967). Obviously, until they are really proficient readers with reading ages in excess of 12,0 on standardised word reading and comprehension tests, and until they are wide and mature readers into the bargain, there is no point in training children to drop words selectively in their reading. Nor should they be encouraged to practise techniques such as skimming and scanning, not to mention more dubious techniques such as 'swirling', reading down the centre of a column with only one fixation per line of about 6 words – 'Thus far no photographs, even of proficient skimmers, have shown a person's eye moving straight down the centre of a column or page of print' (S.E. Taylor, 1965) – and indenting, all of which are strategies to force the reader to drop words and 'get the drift' of a passage. After all, it is futile to drop words until you know what words you are dropping.

## VOCABULARY DEVELOPMENT

To generate efficiency and flexibility in reading, all the experts and authors of developmental reading programmes stress the importance of acquiring an extensive sight vocabulary: 'Since words are the keys to meaning, the first task in teaching children and adults to read should be to develop skill in word recognition' (Gray, 1956); 'This ability to recognize word meanings is basic

to the reading process' (Guiler and Raath, 1958); 'A good reader has a large vocabulary' (Braam and Sheldon, 1959). Whether wittingly or unwittingly, many authorities imply that vocabulary is an inventory of words, the isolated meanings of which the reader must acquire to increase his reading efficiency. On the contrary, it is the meaning of words in conjunction with others which is paramount. In developmental reading exercises, vocabulary questions should require the reader to educe the meaning from the context: for example, 'In this passage "flight" is used in connection with:

(i) bees,
(ii) running away,
(iii) aeroplanes,
(iv) stairs,
(v) imagination, (Pienaar, 1968).

In this instance the multiple-choice question serves a dual function: it extends the meaning of the word 'flight', and clarifies its particular meaning in this context.

All the developmental reading programmes I know of have numerous word-building exercises: work with prefixes and suffixes, and roots; synonyms and antonyms; classifications; and the like. Pupils enjoy working through these until they reach saturation point, which of course varies from one pupil to another, and from one programme to another, but which for the average 12 year old in Std 5 working on an S R A Reading Laboratory seems to be about 4 Power Builders a week, or about 2 concentrated hours all told, on somewhat mechanical, time-consuming exercises.

It must be remembered, then, that vocabulary-building exercises should be short, functional (contextual), and imaginative (varied) if they are to bear abundant fruit.

## DEVELOPMENTAL READING MATERIALS

The passages for comprehension may be either narrative or descriptive-informative, but in practice narrative passages give way progressively to descriptive-informative passages as the reader advances in age and proficiency. All passages should be rigorously controlled in four respects:

(i) the familiarity and suitability of particular topics to particular age groups;
(ii) the length and complexity of sentences;
(iii) the number of polysyllabic words; and
(iv) the number of words that are unfamiliar.

Not only have the passages for comprehension changed, in as much as the mechanical level of difficulty is now carefully controlled, but also the comprehension questions are now far more searching and stretching. In the older type of exercise, questions set on a passage merely tested what the reader remembered of some of the facts, and not always important facts either. For example, 'When did the vixen get a chance to escape?' (Pike, n.d.) is not as important as an understanding of how she escaped, but it is more easily answered and marked. Though the questions were often transparent, tediously full answers were required of the reader. In answer to the above question the pupil was usually required to write: 'The vixen found a chance to escape when the man went away for lunch.'

In most modern developmental reading programmes the questions are multiple-choice and require intelligence and insight on the part of the reader, as well as a recollection of the salient facts. Further, they can be answered quickly and economically: 'One of the most important ideas presented in this story was that:

(i) people can call forth unusual courage in an emergency;
(ii) it is foolish to attempt to be what you're not;
(iii) parents should not tease their children; and
(iv) things that appear impossible seldom are' (S.E. Taylor, 1963).

Having made his decision the reader simply records either the letter which precedes the alternative of his choice, or, at most, the alternative itself as a record and an aid to spelling. After all, when we're asked the time we don't usually reply: 'The time is six o'clock'. Moreover, when children do page through their old exercise books it is to review marks and perhaps re-read the occasional composition, not to check on their mechanical responses to a lot of comprehension questions.

There are two other points in favour of the above example. First, the student is required to discriminate nicely between four equally plausible answers, and if he is to choose rightly he must have both a good grasp of facts and some conception of the author's purpose. Second, multiple-choice questions like these require further careful reading beyond what is required in the passage, or in a straightforward recall question like: 'Who took park in the dance?' (Pike, n.d.) This type of question, therefore, insists on a proper understanding and appreciation of a passage, and comprehension questions, whether oral or written, 'are properly conceived not as tests of understanding, but as aids to understanding ... There is no point whatsoever in asking questions merely for the sake of asking them' (Whitehead, 1966). Admittedly, multiple-choice questions have their shortcomings. For example, they pre-structure the problem to some extent, and

often test recognition rather than recall. Also they admit guessing, however many plausible alternatives are offered. Where open-ended questions permit a reasoned response, they can make good some of these shortcomings; for example, they allow the student to express himself in his own words, and this is not possible in a multiple-choice question. Thus there is certainly a place for really searching open-ended questions in developmental reading programmes. The more variety there is in the type of questions the more the reader has to think and the more adaptable he should become. Moreover, his interest is more likely to be sustained if the questions are varied.

In any event, the emphasis in developmental reading courses is on intelligence, efficiency, and economy. If the accent is to be on the student learning rather than the teacher teaching then obviously the readability level of the material and the reading age of the student need to be matched so that he can proceed smoothly, working on his own for most of the time. In this regard the content and style of the passages for comprehension are all-important. Often passages written or re-written for the specific purpose of being included in a carefully graded set of developmental reading exercises are complete in themselves and therefore satisfying. They avoid the pitfalls so pungently described by Whitehead (1966): 'More fundamental (and irremediable) than the unsatisfactoriness of the appended questions is the unsatisfactoriness of the extracts themselves. Despite claims to the contrary, these are seldom satisfactorily graded either for appeal or for difficulty. Worse still, they are almost invariably either too short or incomplete. Read in their original setting in the books from which they have been torn, they might perhaps have more to offer; presented as they are in glorious and fragmentary isolation, the reading of them is bound to be a tantalizing and depressing experience instead of an enjoyable and satisfying one'. The tacit plea here is for original and complete passages, supported by intelligent questions, which will extend both the reader's knowledge and his understanding.

Whether passages are original or adapted, there is always a danger when writing to a carefully controlled vocabulary and sentence length that the final product will seem flat and colourless – 'written to a formula', in fact. The simple word is often the best word, but if, for example, we substitute 'unhurt' for 'undamaged' in the sentence 'The gun roared and kicked, the snipe flew away undamaged, and Larry with a yell of fright fell backwards into the irrigation ditch', we lose a subtle nuance and a modicum of the humour in this passage from *My Family and Other Animals* (Durrell, 1956). What Flesch says in trenchant criticism of the look-and-say, or whole word, method of teaching beginning reading, can be extended to further reading, if only to make us aware of

the dangers of oversimplifying texts: 'The great game of vocabulary cutting has been the main idea of the reading "experts" for the past ten or fifteen years ... The truth is ... that any normal six-year-old child loves to learn letters and sounds. He is fascinated by them ... The fun in reading lies in the great game of deciphering a hidden meaning – just as the fun in writing lies basically in encoding a message' (Flesch, 1955). It must be remembered that a developmental reading programme should expand vocabulary so that the child's mental horizons are extended and his concepts enriched: 'I have found that most of these slow-learning children are without a sufficient vocabulary to enable them to understand what is put before them. My complaint is that the result has not been an intensive effort to improve their knowledge of language but an increasing amount of published material produced in order that they can work with the vocabularies they have' (T.E.S., April 1968).

This, then, is the very real danger of writing to a controlled vocabulary and a strictly enforced level of difficulty: we risk losing spontaneity, vitality and precision. And the more elementary the programme the more difficult it is not to be constrained by lexical and structural limitations. I do not think that it is desirable or profitable to attempt to write or compile a really vivid and entertaining set of, say, 50 stories of a readability level of less than 9,0, according to the Spache formula, or to set really challenging questions on material of a lesser readability level.

Furthermore, I do not think that it is educationally sound to launch a child with a reading age of less than 9,0, or even 10,0 on a strenuous course of what in most programmes is unrelieved silent reading. He is neither intellectually nor socially and emotionally ready for it. At this rudimentary level of proficiency he needs and wants to read aloud, to an audience if possible. All too few developmental reading programmes afford opportunity for oral reading, self-correction through discussion, and further discussion, all of which consolidate and extend ground covered in the silent reading session. Moreover, children love to read aloud: it enhances visualisation and appreciation. Good readers like to show off their skill, and all children, given the opportunity and encouragement to read aloud, gain in confidence and competence. They learn to read on, or read ahead, which is essential to fluency and expression.

## STUDENT APPLICATION

Students are advised to work on any developmental reading programme regularly and frequently, usually for a period of three

months: 'It is recommended that a schedule of frequent, relatively short periods of time be established for doing the exercises ... Setting aside a short period (20 - 30 minutes) per day to attack the problem of improving reading efficiency is most desirable. Such a schedule will produce much better results than devoting a full evening, or half a day once a week, to the improvement of reading skills' (Braam and Sheldon, 1959).

In addition, those taking the course should practise the disciplines suggested by the author(s) whenever they set eye to print. A developmental reading course on its own is unlikely to promote dramatic or permanent increments in reading efficiency. It must be supported by wide and frequent further reading from a variety of sources, for pleasure and information. *Time spent on reading is probably the most significant determinant of progress in reading.*

## CAUTION

Developmental reading is not a remedial or corrective tool. It should be used primarily in the service of normal pupils who are achieving nearly up to, or in excess of, their potential. Programmes and machines should only be used as corrective devices if instruction is individualised, and the course handled by a qualified remedial reading teacher, or by someone who knows something about and who is in sympathy with reading failures. In the case of less able pupils who are not necessarily failing readers, the programme should be modified in such a way that they can work at a pace that suits them, and on assignments that extend them without being beyond them. Here, too, it is desirable that a qualified remedial teacher be in attendance.

Devices like the controlled reader and the Tach-X tachistoscope can do more harm than good if they are used for large-group instruction when there are children in the class who are retarded in reading, or who, in a bright group, are below the class average. Such children should either be excluded from the group altogether, or given unobtrusive, individual instruction, if this is possible, and similar goals but different assignments which are within their capabilities. If backward and retarded readers are not identified and treated differently from the rest of the group they will grow progressively more frustrated and will either disengage completely or become truculent. In any event they are likely to develop behavioural problems and become disruptive influences in the class simply because they cannot manage the work.

In this regard, what applies to the pupil of normal ability and attainment who has occasional difficulty with aspects of reading

instruction applies even more pertinently to the backward and/or retarded reader: 'No amount of practise in reading situations where difficulties are present can replace the guidance needed for learning new responses to them' (Karlin, 1967).

## CONCLUSION

Any attempt to elaborate something as complex as the reading process can never succeed completely. The whole is invariably more than the sum of the parts. Moreover, no matter how powerful and sophisticated the test instruments, they can never illuminate more than the ninth of the iceberg which shows: 'As the reading process flows by, we dip into the stream to lift out minute samples from which we then describe the entire stream. But no aspect of silent reading can be measured without interrupting the process, for at any moment the pupil is employing a variety of visual, intellectual, and reading skills and processes' (Christian, 1966). Measurement entails repeated samples of normal reading tasks, observation of daily progress over a period of time, and evaluation of changes in pupil improvement and the results of training programmes. One thing that no standardised test has yet plumbed, and one thing that every good developmental reading programme achieves, is the increase in pupils' background knowledge. So we must not imagine that the results of a developmental reading course can be easily quantified; indeed some aspects of an improved reading performance may well elude measurement altogether.

Be that as it may, developmental reading programmes and courses are designed to develop reading efficiency in the learner once he has mastered the basic skills. The programmes are designed to develop competence, principally in silent reading, and they set out to do this by moving the reader systematically and sequentially through a series of graded exercises. In the hands of a capable teacher these exercises should:

(i) enlarge vocabulary,
(ii) improve concentration,
(iii) increase speed and accuracy,
(iv) improve motivation and attitudes,
(v) enhance comprehension,
(vi) broaden knowledge,
(vii) heighten understanding and appreciation, and
(viii) sharpen critical faculties.

The more the developmental reading course can be integrated with and extended by other communication skills – oracy, written expression, drama – and complemented by other subjects, the more

productive and enjoyable it is likely to be, and the more far-reaching and permanent gains in reading efficiency should be. The rôle of the teacher is central: any developmental reading programme will be just as good as the teacher who backs it up.

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CB SLANG

| | | |
|---|---|---|
| *Bear* | - | a police officer |
| *Feed the bears* | - | Pay a traffic fine |
| *Flip-flop* | - | a 'U-turn' |
| *Ground clouds* | - | mist |
| *Hammer* | - | accelerator pedal |
| *Harvey Wallbanger* | - | a reckless driver |
| *Mama Bear* | - | a policewoman |
| *Willie Weaver* | - | a drunk driver |

A.D.A.

# *Erratum*

*The article 'Language development and developmental reading' in our last issue was written by Professor P. Pienaar of the University of Durban-Westville.*