

https://dspace.org/

Functional literacy: Future needs and current progress.

Downing, John

1970
Johannesburg College of Education
https://hdl.handle.net/10539/27474
Downing, J. (1969/1970). Functional literacy: Future needs and current progress. Symposium: A Journal of Education for Southern Africa, pp. 9-15.

Downloaded from a DSpace repository. https://dspace.org/

Functional Literacy: Future Needs and Current Progress

by JOHN DOWNING

Senior Lecturer in Psychology, University of London Institute of Education

I. What Is "Reading"?

Often teachers and reading experts speak and write about "reading" without defining or discussing what they mean by it, and seem to assume that everyone else shares their own concept as to what "reading" is. It is hardly surprising, therefore, that some of the controversies and debates in this field take place on a rather primitive egocentric level. But psychologists, linguists and others who have attempted to define "reading" have come up with remarkably different conclusions. For example, the Russian psychologist Elkonin (1963) states:

> "Reading is a reconstitution of the sound forms of a word on the basis of its graphic representation. Understanding, which is often considered as the basic content of the process of reading, arises as a result of correct recreation of the sound form of words. He who, independently of the level of understanding of words, can correctly recreate their sound form is able to read."

Thus Elkonin excludes comprehension and places his emphasis on the association of graphemes (units of writing or print) with phonemes (units of speech sound). In contrast, Tinker and McCullough (1962) avoid any mention of speech sounds and places their emphasis on comprehension:

> 'Reading involves the recognition of printed or written symbols which serve as stimuli for the recall of meanings built up through past experience, and the construction of new meanings through manipulation of concepts already possessed by the reader. The resulting meanings are organized into thought processes according to the purposes adopted by the reader. Such an organization leads to modified thought and/or behavior, or else leads to new behavior which takes its place, either in personal or in social development."

This emphasis on meaning has been particularly strong in American definitions of reading since the influential statement of Edward L. Thorndike (1917). His controlled observation of children's oral reading of paragraphs led him to conclude:

> "Understanding a paragraph is like solving a problem in mathematics. It consists in selecting the right elements of the situation and putting them together in the right relations, and also with the right amount of weight or influence or force for each. The mind is assailed, as it were, by every word in the paragraph. It must select, repress, soften, emphasize, correlate, and organize, all under the influence of the right mental set or purpose or demand."

In educational publications this led to this kind of definition published by America's National Society for the Study of Education in its 48th Yearbook regarding elementary school reading:

> "Reading is not a simple mechanical skill; nor is it a narrow scholastic tool. Properly cultivated, it is essentially a thoughtful process. It should be developed as a complex organization of patterns of higher mental processes. It can and should embrace all types of thinking, evaluating, judging, imagining, reasoning, and problem solving."

It is this kind of description of reading with the emphasis on meaning and the omission of specific references to the phoneme (sound) — grapheme (written symbol) connections which has been popular for the past forty years.

However, some authorities (e.g. Elkonin, quoted earlier) have narrowed their definitions and specified the ability to translate graphemes to phonemes and written words to spoken words as being the essence of reading. In recent years this aspect of reading has been given increasing attention due to the intervention of the new science of linguistics. Scientific linguists analysing the structure of language have tended to single out the learning of grapheme-phoneme correspondences as being the essential basis of reading. Soffietti states:

> "The linguist believes that the printed word acts as the trigger that releases its oral counterpart, which, in turn, releases a meaning we already possess."

Fries (1962), in his book *Linguistics and Reading* makes the following points:

> 'Learning to read in one's native language is learning to shift, to transfer, from auditory signs for the language signals, which the child had already learned, to visual or graphic signs for the same signals. Both reading and talking have the same set of language signals for language *reception*. In talking, contrastive bundles of sound features represent these signals; in reading, contrastive patterns of spelling represent these same signals."

Which type of definition should be chosen? The *broad comprehensive* definition implied by

Thorndike's research report and spelled out in such definitions as that of Tinker and McCullough in which the *purposes and functions* of reading are given precedence? Or the *narrow* type of definition given by other psychologists such as Elkonin and many linguists in which the *phoneme-grapheme associations* are emphasized?

A British philosopher, Dearden (1967), provides the cue for the position adopted by the author of this present article. In *The Second International Reading Symposium* he asked us to consider the following:

> "Word-recognition implies the foreknowledge of a word, which is now identified in print by means of such clues as can be mustered. So a child's correct sounding may or may not also be word-recognition, depending on how he sees what he is doing. Then is word-recognition reading? There are times, it is true, when our eagerness to detect signs of progress leads us to call this 'reading', but to call word-recognition 'reading' is like calling the isolated naming activities of very young children 'talking': it is to be poised at the very edge of the area covered by a concept. This can easily be seen from the following cases. You could go through a book backwards, from bottom to top and right to left, re cognizing all the words there perfectly correctly, but we should hardly call this 'reading', and certainly not 'reading the book'. Nor would it be any adequate reply to the question 'Have you read so-and-so?' to say that you recognized every word in it. There can be no doubt, however, that continuous word-recognition is a necessary part of the process of reading, because 'reading' shares with the verbs of perception the double feature of making some kind of knowledge-claim on the one hand, and indicating at the same time the basis of the claim on the other. For example, to say that you can 'hear' something is first of all to claim to have identified a certain object, say a mosquito, and secondly to indicate that you identified it on the basis of certain sounds. Analogously, reading is making some kind of knowledge-claim on the basis of word-recognition. What kind of knowledge-claim is implied by reading then? Evidently it is that the meaning of the text is being grasped. There is, therefore, a curious redundancy in talking of 'reading for meaning' as people often do. It is comparable to such pleonasms as 'dreaming dreams' and 'seeing sights', though perhaps it serves as a useful slogan ,when people are too preoccupied with phonic analysis or word-recognition, to remind them of the nature of the activity they are so earnestly about. Adding this to the earlier result, then we can now say that reading is a conscious activity in which we grasp the meaning of a text through a process of continuous word-recognition. With increasing skill, of course, consciousness is focused more and more on grasping meaning, until word-recognition is not itself consciously attended to at all, which is why so-called proof-reading is so difficult an art."

This suggests the conclusion that there is much more to be considered than just the learning of phoneme-grapheme correspondences if we want to understand and explain all the variety of behaviour which we commonly include when we are talking about the everyday life activities of reading. We shall want to include such basic skills as relating graphemes to phonemes as an important part of our study of reading, but it is unlikely to be *the most* important part and certainly not the whole of our concern. Indeed, two very significant researches into the psychology of reading have shown that probably *the key first step in learning to read is correct orientation to the purpose and function of reading.* Reid (1966), discovered that Scottish five-year-old beginners have a "general lack of any specific expectancies of what reading was going to be like, of what the activity consisted in, of the purpose and use of it." Vygotsky's (1962) research on beginning literacy in Russia led to his conclusion that the young beginner "has little motivation to learn writing when we begin to teach it. He feels no need for it and has only a vague idea of its usefulness."

Thus, even in the study of the beginning stages of learning literacy, if one were to single out any particular aspect for emphasis, it would be that of the purposes and functions of reading and writing. It is essential for the young child to understand these when launching on the business of learning the requisite skills. It is essential for educators to remember the functions of literacy in all their teaching and planning of the curriculum. In this way we shall avoid meaningless school rituals and ensure that literacy learning will be relevant to real-life needs from the beginning of the primary school right through to the college level.

That training in literacy skills should continue far beyond the first two or three years at school is clear from Merritt's (1969) survey of the development of "Intermediate Skills" in reading. He cites the work of Loban (1963), Ruddell (1965), and Strickland (1962) as particularly important references, and these indicate that linguistics and psycholinguistics have much more to offer the teacher of reading than merely the scientific analysis of phoneme-grapheme connections. Other important aspects of language structure have to be taken more into account in teaching literacy if we are to make the kind of progress in improving functional literacy which is the theme of this present article.

II. What Is "Functional Literacy"?

The approach in the preceding paragraphs leads us to consider all literacy from a functional point of view. But, in the past, the term "functional literacy" has been used in rather a special

way. For instance, William S. Gray (1955) described "functional literacy" as being "that level of ability to read and write which is normally expected of literate people in the area of culture involved." For America, he concluded that this was at the Grade IV level.

According to Curry (1967) a higher level is required for functional literacy in the United States today:

> "At the present time, 'functional literacy' is used to refer to a person who has acquired the reading and writing skills which are equivalent to an eighth-grade level of education . . . The change . . . to an eighth-grade level as a criterion for literacy was brought about because of an awareness that it is becoming increasingly difficult for the individual with less than an eighth-grade level of education to be an effective person in our society — as head of a household, as a citizen, and as a worker."

Curry's remarks bring home the point that "functional literacy" cannot be related to some fixed level of ability in reading or writing. Rather, it is flexible and determined by the changing needs of the individual in his society. Total illiteracy may have been functional for the serf but in the modern world higher and higher levels of literacy are being demanded.

Jenkinson (1967), too, has called for higher criteria for functional literacy by proposing a new term for such a higher level of functioning:

> "The period when functional literacy was essential has been superseded by one in which technological literacy is imperative. In terms of level, this range appears to be a minimum of grade VII reading but is rapidly moving upwards to grade IX reading competence."

Nor is this demand for improved national standards of functioning in literacy confined to the United States and Canada. Malmquist (1965), the Swedish authority on literacy research, comments:

> "We can no longer be content with a 4th grade standard of reading ability. In my view, this needs to be greatly raised, at least to a ninth grade level. And, very soon, we can reasonably expect the necessity of a further revision of literacy standards, raising the level to a 12th grade reading proficiency."

The term "functional literacy" seems to have developed for the purpose of discussions about the minimum level of literacy which must be acquired for an individual to meet the reading and writing demands made upon him for his successful functioning in society. But, in view of the changing needs of the individual in his soceity, it would seem more useful to define functional literacy, not by any specific "grade level" (in American terminology) or by any particular "reading age" (the British expression), but, more generally, as *the group of reading and writing abilities which an individual needs for a satisfying and effective life in his society.*

A UNESCO (1963) statement spells this out in more detail:

> "A person is literate when he has acquired the essential knowledge and skills which enable him to engage in all those activities in which literacy is required for effective function in his group and community, and whose attainments make it possible for him to use these skills towards his own and his community's development."

III. The Functions of Literacy

So numerous are the functions of literacy that an exhaustive list is hardly necessary or useful. However, the following is a sample of those functions frequently mentioned in the literature:

A. *Individual Welfare:*
   1. Securing information about current events.
   2. About health.
   3. About child care.
   4. About employment opportunities.
   5. About techniques in agriculture and history.
   6. Meeting civic obligation, e.g. selecting a political programme and voting.
   7. Satisfying religious aspirations.
   8. Pondering critically the accuracy, value, and significance of political communications, advertising etc.
   9. Leisure, e.g. access to literary heritage.
   10. Learning in schools and colleges as well as individually.
   11. Self-expression through writing, etc.

B. *Social Functions:*
   1. Acquiring social identity (see especially Tax, 1968).
   2. Group progress in health, industry, etc.
   3. International understanding etc.

On the other hand, illiteracy is commonly recognized as a correlate of:

ignorance
unproductiveness, backwardness and poverty.
disease
crime
superstition
suspicion
strife

But today there are three positive functions of literacy which are of outstanding significance for the future progress of man and society:

(a) Its communication purpose in education.
(b) Its communication purpose in industrial training and work.
(c) Its special contribution to critical rational thinking and reflection in the development of opinions and attitudes.

IV. Functional Literacy in Education

Despite the development of visual and auditory teaching aids, such as film, film-strip, slide and overhead projectors, educational television and radio, tape-recorders, etc., the book with the printed word remains the chief medium of communication to pupils or students. Every secondary school teacher, for example, knows that a boy or a girl with inadequate reading ability is doomed to failure in most of the subjects, he or she is expected to learn at that level. Progress in a pupil's education grinds to a halt without good reading ability. Every practical member of the teaching profession agrees with Sir Cyril Burt's (1962) conclusion that, "Reading is by far the most important subject the young child learns at school." They would probably agree again when he adds: "It is also the most difficult to teach." Indeed most teachers would regard Burt's view as a nicely worded expression of their own ancient professional wisdom. Reading has always been given priority because of its functional significance in education, and its teaching has always been hard work.

But the position has changed greatly in the last quarter of a century. It has changed in two ways. Research has led to improvements in the teaching of reading so that children are now beginning to learn to read rather more easily than they did before the Second World War. For example, the Schools Council's recent report on the Initial Teaching Alphabet — i.t.a. (Warburton and Southgate, 1969) states:

> "Both the verbal evidence and the research evidence lead to the broad conclusion that in the majority of schools, although not in all schools, infants using i.t.a. have learned to read earlier, more easily and at a faster rate than similar children using T.O."

More specifically with regard to functional literacy in primary education, Vernon (1967) points out that "there were fewer children of poor reading ability in the i.t.a. than in the T.O. group", in the experiment with i.t.a. launched by the University of London Institute of Education and the National Foundation for Educational Research in England and Wales in 1961. The present author's recent report (Downing, 1969) on his own experiments conclude that, "i.t.a. does, in fact, reduce the incidence of poorer reading and poorer spelling attainments."

Thus i.t.a. and other developments in the teaching of reading have tended to ease the problem of learning to read in recent years. But such developments have generally affected only the initial stages by facilitating a basic competence in literacy at the primary school level somewhat more easily and at an earlier stage than previously. There has been notably less success in improving standards of functional literacy at the higher levels of education. For example, the official Education Pamphlet No. 50, *Progress in Reading*, describes the results of national surveys of reading ability in England which have been conducted every four years since 1948. These seem to show steadily rising standards from survey to survey since 1948. But this progress is seen to be deceptive in one important respect when one compares these standards with those of 1938. Education Pamphlet No. 18, *Reading Ability*, which reported the 1948 survey, suggested that the average reading age of the eleven-year-olds was probably twelve months behind that of the same age group in 1938. The fifteen-year-olds were twenty-one months retarded. This was because the children in the 1948 survey had either been about to learn the basic skills of reading when the Second World War commenced or they had spent the whole of their infant and the first part of their junior school careers during that war with all its disruptions of schooling. Therefore, if one accepts the official judgement of the first Ministry of Education survey in 1948, then one must conclude that today's English eleven-year-olds and fifteen-year-olds are probably only about five months and one month (respectively) superior in reading age to their counterparts in 1938. This improvement seems negligible especially when one considers the incidental assistance that television has given to the less able child. It would be fair to conclude that standards of literacy have improved only slightly, if at all, in the past thirty years.

In contrast, the need for higher standards of literacy for educational purposes has increased tremendously. Secondary education has been improved and expanded in many ways. In Britain, the legal school-leaving age has been raised by one year and shortly will be raised again by a second year. Many more children are staying on voluntarily for several years longer at school. Post-secondary education has also expanded enormously. The older universities have expanded their numbers of students and several new universities have been created. Higher education for teachers and technical education have both seen very great expansion, too.

Some more perceptive educators foresaw the need to raise literacy standards which would arise from the expansion of secondary and higher education. When he was United States Commissioner of Education in President John F. Kennedy's administration, Frances Keppel, who had come from being Dean of Harvard's Graduate School of Education wrote:

"The better teaching of reading is the foundation of higher standards in our schools and colleges, and other efforts will fail unless this first step is taken."

More recently, Professor Torsten Husén (1968), in an article with the title *Lifelong Learning in the 'Educative Society'*, states:

"Today's school must put far greater emphasis on the skills or 'instruments', that is, subjects which are necessary in order to study other subjects sucessfully."

Literacy skills clearly are *par excellence* the 'instruments' of education.

During the past year or two there has been a growing disquiet on a more general scale about the serious gap between the rapidly expanding demands for higher levels of reading ability and the lack of any planned systematic effort to improve the teaching of literacy on a developmental basis through not only the primary school, but through the secondary school and beyond. The researches of Pringle *et al* (1966) and of Morris (1966) confirm each other in showing the need to continue the teaching of literacy skills beyond the traditional first three years of primary schooling. Morris showed also that teachers of older classes are poorly prepared in their teacher training courses as far as the teaching of reading is concerned. Her findings have been confirmed in other studies by Gardner (1968) and by Goodacre (1969).

It is quite obvious that, on educational grounds alone, a very great effort is urgently needed throughout the school and college systems to raise standards of literacy to the level required by our new educational circumstances.

V. Functional Literacy and Manpower

The second positive function of literacy which was noted as being of outstanding significance for future progress was its communication purpose in industrial training and work. As in the field of education, here also in the manpower area there is in the air a sense of impending crisis. In Britain manpower experts are beginning to express frustration over the disappointing results of industrial re-training projects due to inadequate literacy skills of many potential trainees.

American retraining projects ran into this problem earlier. Jenkinson reports, "A U.S. government program was organized to train relatively unskilled people for the new world of work. By May 1964, of 107,000 who were approved for such training, only 17,000 actually finished the courses. It is important to recognize that notwithstanding the small sub-group who completed the courses, the original group as a whole from which they came was actually "the cream of the unskilled crop. They were by and large the better educated of those who were out of work, and they were neither the very young nor the very old in the work force."

"While many factors accounted for this large attrition, a major one appears to have been *their inability to benefit from instruction in new techniques due to their failure to read efficiently.*" (italics added).

That the level of unemployment may actually be determined by standards of functional literacy is shown by Curry. In America jobs are empty because the men who seek to fill them are not sufficiently literate. He says:

"Automation, brought about by advanced technology, has reduced the demands in our society for unskilled workers. Today, less than five per cent of all jobs are available to the unskilled worker. What will the percentage of unskilled jobs be in the coming years? Many of the jobs which are now manned by unskilled workers will become obsolete in the immediate forthcoming years. A very rapid trend in this direction has been observed during the last two decades. What will these unskilled workers who are incapable of being trained for another job do when they are displaced by automation? Will they be able to support themselves and their families or will they become parasites on our society? The new technology with its rapid and continuous change is demanding constant on-the-job training for most workers to remain abreast of the changes in most occupations. The current prediction that each individual will have to be re-trained three times during his lifetime points to the need for a literate adult citizenry. The unemployment figures indicate that there is not a deficit of available jobs; there is a deficit of trained and qualified personnel to fill these available positions. The development of the basic communicative skills through Adult Basic Education programs will enable many of the illiterate adults to prepare for another occupation or be trained for the changes in the present occupation or vocation brought about by the new technology."

Patchwork courses for illiterates can only be a temporary expedient. The demands for higher standards of functional literacy are *ever increasing*. Richard B. Adams (1967) of the U.S. Office of Education, in his recent article *Reading Research and the Federal Government*, makes this prediction:

"Now let us dwell for a moment on what the 1980's will demand of our society. First, we know that our economy will be producing highly sophisticated goods and services which will demand exceedingly well trained technical and professional skills from the labor force. Secondly, our relatively shrinking work force will put a pressure of demand on the pool of the unemployed. These requirements of our economy will diminish our

ability to tolerate the costs of supporting the chronically unemployed. Everyone old enough to work must possess employable skills."

Adams goes on to show the danger that lies ahead in the 1980's if American education does not meet the greater demands for literacy which will come from the need for training skilled manpower. His projection indicates that the shrinking proportion of the population who are employable and therefore productive may be impossibly overloaded and squeezed by the expanding proportion of the population who are non-producing consumers either because they are still in full-time education or because their level of functioning in literacy and, hence other skills, is inadequate for 1980's needs.

Thus a general improvement in standards of functional literacy is a vital key to securing the improved standards of living which are the promise of the new technology. Getting this improved level of functional literacy is clearly a priority job for the schools. Adams states, "The schools of tomorrow, will HAVE TO do a better job of teaching and training if our population is to be intellectually equipped to shoulder the burden of the 1980's."

These needs of manpower training reinforce the needs of expanding secondary and higher education. A greatly improved level of functional literacy is imperative for success in both endeavours.

VI. Functional Literacy and Individual Freedom

The two previous sections of this article have focused the practical and materialistic needs of education and industry. The needs of leisure and personal development, however, are not overlooked. Indeed, functional literacy has a third vital role in man's progress at this time which is related to this other type of need.

The development of mass media, particularly television has brought many educational and other advantages, but it also offers opportunities for mass persuasion which could whittle away genuine individual freedom of thought. As television develops, and particularly as means are found to extend its range, the temptation to use it for purposes of mass exploitation will grow. Television is particularly liable to present a biased picture of events. The TV viewer cannot slow down the presentation to mull over the argument, nor can he reverse the TV programme to check on an inconsistency in the argument. Too great a reliance on such mass media could reduce the individual's ability to form really independent views and his capacity to assist in making decisions about the developing life of his community.

The freely available book in the public library and bookstore gives ample time and opportunity to ponder, to question, and for internal debate with the author. Therefore, there is this further need to increase children's ability to use books and to give them greater comfort and confidence in reading activities. Much more could be done to develop children's abilities in *critical reading.* Then they would naturally search out books to get a full picture of a topic or problem, and would be much more likely to develop into adults who are able to choose logically between alternatives on a basis of knowledge and reason.

VII. Conclusion

> *"The struggle against illiteracy is one of the most important and also one of the most gigantic and demanding tasks of our present generation. This task has two facets. First to eliminate illiteracy. Second to raise the standard of functional literacy."*
>
> Eve Malmquist (1965).

Malmquist's two facets seem to be interwoven. The first on a world basis depends on the success of the second in the leading nations. But everywhere must come a revolution in thinking about functional literacy. The old norms of the 1930's have proved inadequate already in the 1960's. They will certainly not do for the 1970's and are unthinkable for the 1980's. To raise the level of functional literacy is a tremendous challenge to all teachers and all schools throughout the whole range of our education system — primary, secondary and higher institutions.

Several immediate steps need to be taken as the first stage in planning and preparation for the increasing importance of literacy learning in the future.

First, new pre-service and in-service courses should be established which will spread existing knowledge about literacy development to a much wider range of people in education. An immediate objective is the creation of cadres of specialists in development literacy. In this group should be university and college of education lecturers, local education authority inspectors and advisers, who would in turn arrange courses to develop a more specialized knowledge of developmental reading and writing among teachers.

Two recent innovations are steps in the right direction. The University of Reading Institute of Education has established the first "reading

centre" in Britain. For the M.A. in Educational Psychology the University of London Institute of Education has created a special option in "the psychology of literacy." Urgently needed now are one year diploma courses for experienced teachers. Shorter sandwich-type courses may be useful also. An organized effort to build such new courses in literacy development could lead to a real improvement in standards of functional literacy within a reasonably short period, possibly in 5 to 7 years.

However, courses alone will not suffice. Higher priority should be given to the subject of developmental literacy in other ways. It will be particularly important to encourage expansion in research on literacy learning, and, at the same time, to develop new channels for the dissemination of information about developmental reading and writing on a regular ongoing basis. School systems should recognize the special role of reading in education by creating key posts of special responsibility for this subject in their advisory services and in their schools. Colleges and Universities too should have separate departments of "reading" with professors and lecturers specializing in this important subject.

BIBLIOGRAPHY

ADAMS, R. B. (1967), "Reading research and the Federal Government." In SCHICK, G. B. and MERRIL, M. M. (eds.), *Junior College and Adult Reading Programs — Expanding Fields.* Milwaukee: National Reading Conference, Inc.

BURT, SIR C. (1962), Preface in DOWNING, J. (1962), *tw bee or not to be.* London: Cassell.

CURRY, R. L. (1967), "Adult literacy — progress and problems." In SCHICK, G. B. and MERRILL, M. M. (eds.), *Junior College and Adult Reading Programs — Expanding Fields.* Milwaukee: National Reading Conference, Inc.

DEARDEN, R. F. (1967), "Curricular implications of developments in the teaching of reading." In DOWNING, J. and BROWN, A. L. (eds.), *The Second International Reading Symposium.* London: Cassell.

DOWNING, J. (1969), "i.t.a. and slow learners: a reappraisal." *Educational Research,* Vol. 11 pp. 229—231.

ELKONIN, D. B. (1963), "The psychology of mastering the elements of reading." In SIMON, B. and J. (eds.), *Educational psychology in the U.S.S.R.* London: Routledge & Kegan Paul.

FRIES, C. C. (1962), *Linguistics and Reading,* New York: Holt, Rinehart and Winston.

GARDNER, K. (1968), "State of Reading." *Crisis in the Classroom.* London: Daily Mirror paperback.

GOODACRE, E. J. (1969), "A survey of the teaching of reading." *Abstracts of the 1969 conference of the British Psychological Society Education Section.* pp. 73—74.

GRAY, W. S. (1955), "Current reading problems: A world view." *Education Digest,* Vol. XXI, pp. 28—31.

HUSEN, T. (1968), "Lifelong learning in the 'Educative Society'." *International Review of Applied Psychology,* Vol. 17, pp. 87—99.

JENKINSON, M. D. (1967), "Preparing readers for an automated society." In FIGUREL, J. A. (ed.) *Vistas in Reading.* Newark, Delaware: International Reading Association.

LOBAN, W. D. (1963), *The Language of Elementary School Children, N.C.T.E. Research Report No. 1.* Champaign, Illinois: National Council of Teachers of English.

MALMQUIST, E. (1965), "Teaching of reading: A world-wide concern." In FIGUREL, J.A. (ed.), *Reading and Enquiry.* Newark, Delaware: International Reading Association.

MERRITT, J. E. (1969), "Intermediate skills and the teacher." *Proceedings of the United Kingdom Reading Association.*

MORRIS, J. (1966), "How far can reading backwardness be attributed to school conditions." In DOWNING, J. (ed.), *The First International Reading Symposium.* London: Cassell.

PRINGLE, M. L. K. *et al* (1966). *11,000 seven-year-olds.* London: Longmans.

REID, J. F. (1966), "Learning to think about reading." *Educational Research.* Vol. 9, pp. 56—62.

RUDDELL, R. B. (1965), "The effect of oral and written patterns of language structure on reading comprehension." *Reading Teacher,* Vol. 18, pp. 270—275.

SOFFIETTI, J. P. quoted in STAIGER, R. C. (1958), "What is Reading?" In CAUSEY, O. S. (ed.), *The Reading Teacher's Reader.* New York: Ronald Press.

STRICKLAND, R. G. (1962), "The language of elementary school children. Its relationship to the language of reading text books and the quality of reading of selected children." *Bulletin of the School of Education, Indiana University,* Vol. 38, No. 4.

TAX, S. (1968), "Self and society." In DOUGLASS, M. P. (ed), *Claremont Reading Conference Thirty-second Yearbook.* Claremont, California: Claremont University Center.

THORNDIKE, E. L. (1917), "Reading as reasoning: A study of mistakes in paragraph reading." *Journal of Educational Psychology.* Vol. 8, pp. 323—332.

TINKER, M. A. and McCULLOUGH, C. M. (1962), *Teaching Elementary Reading.* New York: Appleton-Century-Crofts.

UNESCO (1963), "World campaign for universal literacy. In HAYES, A. S. (ed.), *Literacy.* Washington, D.C.: Center for Applied Linguistics.

VERNON, M, D. (1967), "Evaluations — 11." In DOWNING, J. *et al, The i.t.a. Symposium.* Slough, Bucks.: National Foundation for Educational Research in England and Wales.

VYGOTSKY, L. S. (1962), *Thought and Language.* Cambridge, Mass.: M.I.T. Press.

WARBURTON, F. W. and SOUTHGATE, V. (1969),*i.t.a.*: *An Independent Evaluation.* Edinburgh: Chambers and Murray.