Both the child and the task need to be considered in designing any reading program. The test of the sequence and structure of reading instruction is not simply a matter of completing the learning activities correctly, nor is it the level of attainment reached in the reading test, but it is rather the ability of the student to apply the skills learned to any reading situation in which he finds himself. Therefore, teachers need to think in terms of reading curriculum and not narrowly in terms of reading instruction in the areas of word attack skills, comprehension, and reference skills. There are three aspects of the reading curriculum which need consideration in planning school work: reading purposes, reading media, and reading skills and techniques. Reading is too often thought of in terms of books. The child is not prepared for effective reading unless he has had experience of the whole range of media in terms of types of publication, types of writing, and types of author purpose. Two interrelated problems, structure and transfer, must receive careful attention when planning the reading curriculum. The use of the total curriculum as the basis for reading instruction holds out the greatest hope of a higher level of success in the future. (SW)
Symposium D. The Teacher and the Reader
Grades VII - XII

Sequence and Structure in Reading Development

One of the great difficulties which has beset teachers and research workers over the years has been the search for a panacea for reading instruction. Some years ago an experienced teacher approached me at the commencement of the last session of a 14 session course for remedial reading teachers saying 'We have come along faithfully to all the meetings - I hope you are going to tell us the secret of how it is really done tonight'.

In reading we have searched for the order in which we could present the various facets of the process so that we could be confident that the sequence of learning was absolutely right. But when we talk about sequence and structure - what do we mean? Certainly in mathematics it would be difficult if not impossible to teach the concept of 'twoness' before the child has established a concept of 'oneness'. Equally multiplication would be an extraordinarily difficult process to master until the pupil had learned the addition process.

If there is a perfect linear order in which reading skills should be presented to the pupil then at this moment in time we do not know what this order is.

Indeed one might well question whether there will ever be the discovery of such an order. Two factors militate against such a possibility. Firstly reading is not a skill, but rather a mass of skills, techniques and knowledge, various facets of each being brought into play according to the nature of the specific reading task undertaken. Secondly the abilities, personality and interests of the individual pupil seem to exercise a controlling factor on learning from the point of view of both order and type. This is not to say that there cannot be sequence of structure but rather that both child and task need to be considered in designing any reading programme.
Structure itself has often been used in terms of an order decreed by published materials or the teacher but it could equally be interpreted as an overall plan or the main elements around which a programme could be built. Such a view would seem essential for although it is possible to devise activities specifically for the mastery of various comprehension, reference and study skills, it is not possible to replicate all the varied reading situations in which these elements may be needed in the future. Indeed the comprehension tests used in schools and research projects are always unreal in comparison with the normal usage of comprehension skills in life. Authors do not write text-books or novels in the form of comprehension exercises and very often the pupil has first to form the questions for himself before he can think of looking for an answer. Though reading undoubtedly has to be taught its use is in all areas of human activity and is employed not for its own sake but rather for its outcome in terms of information, ideas or simply enjoyment. This however is only one of the problems which faces the teacher in trying to give structure to the reading situation. The architect when he designs a building has a clear view of the finished product. We have no such clear view and yet efficiency in education depends upon the clarity with which one can see the end objectives.

Gephart (1970) writes 'Many statements have been made which assert that our society has a reading problem. Those assertions have been made with sufficient authority and frequency that they have been accepted as fact: a reading problem exists. What is the desirable level of reading competence to be achieved by the individual in our society? Even more basically, what level of reading competence is necessary to function in our culture? Neither of these questions has been answered on either an empirical or logical basis. Reading and reading achievement have been the target of measurement efforts over the years, but the data do not answer the two questions cited above'.

Murphy in reviewing the literature as part of the U.S. Project 0-9031 Adult Functional Reading came to the conclusion 'However, there exists neither a good estimate of the reading ability necessary to function satisfactorily in modern society nor a satisfactory estimate of the absolute reading achievement of reasonably defined sub-groups in the United States'. Though the quotation mentions the U.S.A. the problem is the same the world over.
Murphy in Project 0-9004 tried to identify a number of tasks which are performed by adults in carrying out their ordinary everyday activities. In a very varied sample he found that 20% of the adult population could not complete 50% of the tasks. Only 20% of the adults completed all tasks satisfactorily even though the tasks themselves were judged to be simpler in nature than the items in comprehension tests which might have been given. It would seem therefore that the transfer of reading skills to later adult reading activity is not as good as we could have hoped. Equally one sees the twelve year old child being able to extract information from a reference book only by copying it out word for word, the fifteen year old unable to cope with the use of the passive mood in reporting an experiment in Science and the college undergraduate wasting time because he is not able to decide which items of printed matter are going to be of most help to him by any other method than reading them all.

It would seem clear therefore that the test of the sequence and structure of reading instruction is not simply a matter of completing the learning activities correctly, nor the level of attainment reached in a reading test but rather the ability of the pupil to apply the skills learned to any reading situation in which he finds himself. I would suggest therefore that we need to think in terms of the Reading Curriculum and not narrowly in terms of reading instruction in the areas of word attack skills, comprehension and reference skills.

The simplest definition of the Reading Curriculum is that it is the sum total of all occasions on which a person has contact (or should have contact) with the written word.

Immediately therefore you will note that the Reading Curriculum is wider than school experience, it covers all experience. Further reading is considered not as a thing to be taught in isolation but rather to be considered as a part of all school activity. Hence reading instruction could take place in a geography lesson because a need arose just as the skill can be used to seek out geographical information.
The reading Curriculum also suggests a preparation for the use of written language as an adult within society and not only as satisfying study needs within the school.

The Reading Curriculum has three aspects which need consideration in planning school work, namely, reading purposes, reading media and reading skills and techniques.

Purpose in reading is important for the following reasons:

(a) Unless the child is reading with some specific end in mind he is unlikely to be highly motivated towards the task.
(b) Purpose sets the type of reading behaviour which is most appropriate to the task.
(c) Purpose sets the questions to which answers are to be found and helps the reader to ensure that suitable materials are selected.
(d) Purpose relates the work to living in general and enables the child to transfer skill learning from one task to other similar tasks.

Reading is too often thought of in terms of books. The child is not prepared for effective reading unless he has had experience of the whole range of media in terms of types of publication, types of writing and types of author purpose.

**Reading Skills and Techniques**

These have been divided by Merritt into the following:

(a) Goal setting skills
   The organization of purposes and the setting of appropriate questions.

(b) Planning skills
   Accessing appropriate material, the survey and evaluation of materials, the selection of suitable reading strategies.

(c) Read Skills
   Word attack skills, linguistic knowledge and comprehension skills.

(d) Development Skills
   The evaluation of performance, the outcomes of reading, the storage, retrieval and communication of the results of reading.
Two interrelated problems must receive very careful attention when planning the Reading Curriculum namely those of structure and transfer.

Structure

There must obviously be some structure in a reading programme if progress is to be made. However there is little evidence to support the Behaviourist claim that all skills develop in a linear manner. There are generalised stages of development in reading but there does not seem to be any one perfect growth pattern with regard to the steps in the development of reading skills. Indeed children at the same general level of reading ability evince a wide variety of levels of development in the various sub-skills of reading. Certainly a single scheme of work in reading which all children should follow does not seem a realistic objective. Rather should the teacher become so knowledgeable concerning the skills of reading that she can analyse any task in terms of skill needs and know which type of help a child will therefore need to complete the task successfully.

Transfer

It is easy to teach a skill well, even for it to be mastered and yet for the child not to apply it in other situations where its use is relevant. Most teachers will have met with this in the use of phonics. It may be that the child has not learned how and where to apply the skill.

The more numerous the different types of reading occasion which can be set up for the use of a skill the more likely the child is to realise that type of occasion in which it is appropriate to use the skill. If skills are taught in devised situations in isolation from the areas where they could be used it is obvious that transfer becomes difficult. It would seem therefore that the early association of skills with realistic purposes is more likely to aid their effective usage later.

Planning the Reading Curriculum

No matter which situation the teacher is in there will be certain constraints which forbid the establishment of the ideal, if it exists, reading curriculum. The teacher must however take a very close look at their situation to see what approaches are likely to be most effective.
There are likely to be two major directions:

(a) Commencing with the total curriculum and finding ways of ensuring that growth in reading skills progresses smoothly.

(b) Commencing with skill teaching and then providing sufficient opportunities for their realistic application.

The following areas will need to be considered:

(a) School building;
(b) Type of materials and equipment available;
(c) How the staff are organised;
(d) How the children are grouped;
(e) What educational ideals are held;
(f) What type of behaviour is expected from the children in learning and teaching situations;
(g) What contact with other groups within and outside the school is possible.

(The above discussion is considered at length in Units 10 and 11 of the Reading Curriculum of The Open University Course E261 'Reading Development' (Moyle 1973).

It is the present writer's belief that the use of the total curriculum as the basis for reading instruction holds out the greatest hope of a higher level of success in the future. This of course places a great burden upon teachers for they must carefully observe the child and the tasks he undertakes taking every opportunity that is offered to give that teaching which will extend skill development. The teacher needs to have some back-up services if this is to succeed. The suggestions which follow have been found to provide this type of help but equally are usable by pupils at this stage of development. It is noted that when children are involved in the planning of the work in this way they become much more independent in the learning situation.

Range of types of media

When helping a child to plan any piece of work it is useful to have a mnemonic which will help locate all the possible sources of printed media which could be helpful. Frequently check-lists of the type set out below can help the teacher to find new dimensions to a well worn subject area. A further use could be found in the
development of resource systems within the school.
Fiction
Textbooks
Reference books
Journals
Magazines
Newspapers
Comics
Brochures
Pamphlets
Advertisements and Notices
Legal documents
Reports and Minutes
Forms and Questionnaires
Regulations
Instructions
Letters
Children's written work
Signs and Symbols
Fliers

Types of author purpose

The child should have contact with the full range of author purposes if he is to be able to set appropriate reading strategies and so become independent as a reader. It would seem rather obvious that the intent of the author affects the presentation of the content and sets the scene for the type of responses which the reader should make.

To entertain - novel or dramatic work
To inform - encyclopaedia, certain types of letter or brochure
To persuade - advertisement, political pamphlet
To elicit information - questionnaire, form, letter
To proscribe - legal documents, regulations
To proscribe - instructions

Types of writing style

Variations in the style of writing set the limits on appropriate reading strategies as well as helping in decisions as to the suitability of a certain document to the purposes of the reader.
Children equally must explore the range of human purposes if they are to use reading as a major skill in the situations they will meet in adult life. The following is derived from the five basic divisions of human purpose proposed by Merritt.

Home and Family
Leisure
Consumer
Community
Employment

**Associating Purposes and Media**

It is useful to compile matrices using any of two of the above lists or similar lists devised by yourself. Again these could form the basis of resource units but they are helpful in drawing up the possible range of printed material which could be of use for a given subject area or centre of interest. Further such matrices kept as records will tell the teacher whether the work undertaken is covering the whole range of purposes and media.

**Classification of Media**

**Home and Family**

<table>
<thead>
<tr>
<th></th>
<th>Housing</th>
<th>Health</th>
<th>Housekeeping</th>
<th>Personal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fiction</td>
<td>Dickens</td>
<td>Camus</td>
<td>McDonald</td>
<td>Dickens</td>
</tr>
<tr>
<td></td>
<td>&quot;Bleak House&quot;</td>
<td>&quot;The Plague&quot;</td>
<td>Below the Stairs</td>
<td></td>
</tr>
<tr>
<td>2. Text book</td>
<td>&quot;Homes through the Ages&quot;</td>
<td>Dr Spock</td>
<td>Good Housekeeping</td>
<td>Hygiene</td>
</tr>
<tr>
<td></td>
<td>Pevsner</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Journal</td>
<td>Surveyor's Journal</td>
<td>The Lancet</td>
<td>Good Housekeeping (Family Circle)</td>
<td>Diary</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------</td>
<td>------------</td>
<td>----------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>5. Magazine</td>
<td>&quot;Homes and Gardens&quot;</td>
<td>Family Doctor</td>
<td>Family Circle</td>
<td>Woman</td>
</tr>
<tr>
<td>6. Newspaper</td>
<td>Dalton's Weekly</td>
<td>The Vegetarian</td>
<td>Leigh Gazette</td>
<td>Sun</td>
</tr>
<tr>
<td>7. Comic</td>
<td>Immigrant Cartoons</td>
<td>Dental Cartoon Publications</td>
<td>The Gambols</td>
<td>Valentine</td>
</tr>
<tr>
<td>8. Brochure</td>
<td>Catalogue for Cold Houses</td>
<td>B.M.A. Booklet</td>
<td>Gas Services</td>
<td>Body Building</td>
</tr>
<tr>
<td>9. Pamphlet</td>
<td>Everglaze Double Glazing</td>
<td>M.O.H. pamphlet</td>
<td>Appliance leaflets</td>
<td>Cosmetic use</td>
</tr>
<tr>
<td>10. Notices and Adverts</td>
<td>Auctioneer's Notice</td>
<td>Anti-smoking warnings</td>
<td>Coupons</td>
<td>Shopping</td>
</tr>
<tr>
<td>11. Legal Documents</td>
<td>Deeds</td>
<td>Medical Card</td>
<td>E.P.</td>
<td>Birth Certificate</td>
</tr>
<tr>
<td>12. Reports and Minutes</td>
<td>Council Minutes</td>
<td>Health Committee Report</td>
<td>Housekeeping accounts</td>
<td>School report</td>
</tr>
<tr>
<td>13. Forms and Questionnaires</td>
<td>Census</td>
<td>Life insurance</td>
<td>Market research</td>
<td>Registration (birth etc.)</td>
</tr>
<tr>
<td>15. Instructions</td>
<td>Do-it-yourself House Kits</td>
<td>Medicine bottle lab labels</td>
<td>Wiring a plug</td>
<td>Child care</td>
</tr>
<tr>
<td>16. Letters</td>
<td>Mortgage negotiations</td>
<td>Absence notes</td>
<td>Bills</td>
<td>Love letters</td>
</tr>
<tr>
<td>17. Fliers</td>
<td>Estate Agents circular</td>
<td>Drug leaflets</td>
<td>Discount vouchers</td>
<td>Club membership</td>
</tr>
</tbody>
</table>
| 18. Signs and Symbols | Ordnance Survey Maps | Red Cross | Woolmark | 🅳 
Skills

The teacher will be helped by some list of skills which should be developed at this stage of school life e.g. Strange. Here it is only possible to list the areas in which these skills lie.

The pupil must learn to read efficiently for any purpose for which a need arises and not least that he can read for personal pleasure.

The pupil must learn to plan his reading in the light of the purpose he has in mind.

The pupil must learn to locate the type of material which he needs to satisfy his purposes (library and survey skills) and find those sections of a text likely to be of most help (reference skills).

The pupil must learn to select the most appropriate reading strategy for the task in hand. These are of three major types:

(a) Study reading - a rather slow and careful approach involving all levels of comprehension, ability to make notes and precis and to memorise.

(b) Skimming - reading quickly to gain a general impression.

(c) Scanning - reading quickly to find isolated pieces of information rather than reading the total text.

The pupil must learn to understand, process and make good use of the results of his reading. There appears to be a number of levels at which this takes place.

(a) Literal comprehension. The ability to give answers to questions such as 'what did the author say?' and follow simple directions and instructions.

(b) Translation. No two people regularly use the same vocabulary or sentence structures to express identical ideas. As we can only think effectively in our own vocabulary and structure it is necessary to reexpress the author's work in our own language.

(c) Reorganisation. The classification and often re-ordering of ideas presented into a form more easily handled by the reader.

(d) Inference. Appreciation of main and supporting ideas, cause and effect relationships and the prediction of outcomes.
(e) Evaluation. Making judgements concerning relevance, reality, author purpose, bias validity etc.

(f) Appreciation. Emotional response to the material, style, characterisation and plot.

(g) Memorisation. Selection and memorisation of those elements felt to be worthy of the effort.

(h) Action. Making use of the results of the processing. This could be immediate or long term and the action could be of a varying nature from imaginative thinking to the undertaking of some physical task.

Planning - starting with content

If a teacher tries to develop reading skills by taking opportunities for skill teaching which arise from the total curriculum then some planning device is needed as well as a thorough understanding of the nature of reading skills. I have found Merritt's G.P.I.D. sequence of great value here for the children can learn to operate it themselves over a period of time.

Goals - What should I do?
What do I want to do and why?
Which are most important to me and to others?

Plans - What might work?
What information do I need?
Which skills will I need?

Implementation - Am I exercising methods and techniques appropriately?
Am I keeping my goals clearly in mind?

Development - Did I get what I wanted?
How can I use my findings?
How can I store my materials?
What follow-up activities seem worthwhile?

On arrival at the planning stage the following three possibilities might arise from the point of view of skill development.

(a) All the skills needed to complete the activity have been learned so that the whole piece of work will be a consolidation of previous skill-learning.
(b) Readiness for the development of skills not previously learned is such that with support the child will master the skills within the work to be carried out.

(c) The child must have some specific instruction before he can proceed to the implementation of his plans. Transfer difficulties should not arise here as the need for the skill has already been realised and immediately it is mastered then it will be used and consolidated in a realistic reading context.

**Purpose - resource grids**

These form a simple but useful way of ensuring that reading for information is effectively carried out. One of the great problems teachers find when young children are sent to books for information is that they copy large chunks of text out of books without processing it. The usual cause of this type of behaviour is that they have not broken down the questions to which answers are required into sufficient detail. For a long time the child needs help to do this successfully.

**Outline example**

**Concluding**

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Source</th>
<th>Resource</th>
<th>Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>How was coal formed?</td>
<td>1. Library</td>
<td>Text and reference books</td>
<td>Indexing, Scanning</td>
</tr>
<tr>
<td></td>
<td>2. Museum</td>
<td></td>
<td>Interpretation of diagrams, Summarising</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>collecting information.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interviews</td>
<td>Transposing spoken language into written</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Union records</td>
<td>language, Reading between the lines,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Song books</td>
<td>Evaluating differing viewpoints.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sociological histories</td>
<td></td>
</tr>
<tr>
<td>What are miners like?</td>
<td>1. Miners</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Union</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interpretation and</td>
<td></td>
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<td></td>
<td></td>
<td>collation of information</td>
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<td></td>
<td></td>
<td>Interpreting technical</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>information</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is coal used for?</td>
<td>1. Library</td>
<td>Charts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Government ministries</td>
<td>Tables</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Coal Board</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Electricity Board</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Gas Board</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Planning - starting from skill-learning

When one starts from a skill-learning base then it is important to legislate for the immediate wider usage of these skills and this is not always easy. One might for example teach a particular phonic rule and find that the instances of that rule met in the next few days of reading are so few that the rule is forgotten.

An interesting possibility arises in the case of reading laboratories. Basically the child reads a short passage and then completes comprehension, word study and phonic exercises based upon it. Left there the skills could be associated only with the laboratory situation. However, the short passage must have some content and if the child is interested by it there is the possibility of following the exercise up with reading in the same topic area. This is facilitated in the S.R.A. laboratories which have a library of books matched for reading level and content and also list books from other publishers which cover similar subject matter.

Whichever approach is used we must ensure that we produce adults who do read and not merely those who can read. Murphy suggests that the average American spends more than ninety minutes of every day in some sort of reading activity. So far, so good. However much of the reading activity appears to bring little satisfaction so we must add a further criterion for success - the reading should be effective if it is to be at all worthwhile.

References


