# THE EVOLUTION OF A FUNCTIONAL LITERACY PROGRAM, WITH RECOMMENDATIONS FOR RESOURCES AND METHODOLOGY

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by

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## ABSTRACT

A program in functional literacy was undertaken in March 1971, at the Literacy Training Center in Yarmouth, Nova Scotia, under the auspices of the Adult Vocational Division of the Nova Scotia Department of Education.

According to the original design of the program, training was to be multi-media and largely self-directive, the students being guided by a master chart of the many skills involved in reading.

The development and implementation of this program, however, revealed that considerable modification of the original assumption was necessary. Through minute analysis of commercial reading systems for the purpose of supplying materials appropriate to the various skills on the master chart, and through the testing of those materials with students, the research team evolved criteria for evaluating resources. Close work with students on a trial-and-error basis provided experience and knowledge leading to a methodology which combined multi-media individual instruction with the more traditional classroom instruction, emphasizing small groups.

This study traces the evolution of this program and provides a methodology for adult literacy training and an analysis of commercial reading systems designed to augment that methodology.

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# CHAPTER I

# INTRODUCTION

## The Problem

A Literacy Training Center was established in Yarmouth, Nova Scotia, in 1971 to develop a program according to the assumption that adults could successfully overcome illiteracy by a learning process that was largely self-directive. The implementation of the program, however, indicated that the original assumption needed considerable modification. This study will describe the evolution of this program, providing a methodology and an analysis of commercial reading systems designed to augment that methodology.

## Historical Background

In 1967, under a Federal-Provincial agreement (the Adult Occupation Training Act), Nova Scotia was empowered to develop programs to upgrade adults so that they could either obtain employment or meet the requirements of a vocational training course. These Basic Training in Skill Development programs were originally instructor-class centered with no provision for individualized instruction. Students in a class differed widely in terms of abilities, needs, and goals. Furthermore, very little reading material suitable for adult students existed, especially for those who had to begin at the

illiterate level. Even comprehensive systems, like Learning-100, did not provide for the needs of non-readers.

In 1970, at the request of the Adult Vocational Training Division of the Department of Education, Nova Scotia Newstart designed a functional literacy program to compensate for the inadequacies of existing Basic Training for Skill Development programs at the literacy level. The developers hypothesized that a Dacum (Developing a Curriculum) method utilizing a self-instructional approach would be more suitable than the traditional method for illiterate adults. The research team hired to develop the program discovered that, in practice, certain assumptions implicit in such an approach were not feasible for literacy training and that certain aspects of the traditional approach had to be retained.

## Purpose of the Study

The purposes of this descriptive-analytical study are:

1. To describe the development and implementation of a demonstration project in functional literacy. Jones (1966) describes demonstration projects as operational activities undertaken to display the feasibility and/or desirability of promising ideas, techniques, or programs with the objective of stimulating their adoption elsewhere.

2. To describe how the Dacum assumptions were tried and modified to fit the practical needs of the adult learning to read.

3. To provide teachers with a methodology and an analysis of a wide variety of commercial reading systems suitable for use with adults.

## Procedures

During the development and operation stages of the functional literacy program the research team kept records on the analysis of commercial reading systems, on materials, ideas, and lesson plans tested with students, and on conferences in which operational problems were discussed. In addition, reading tests were administered.

For the purposes of this study, the researcher collected the data compiled by the research team, synthesized it into a suggested methodology for literacy instruction, and designed a model by which to array the data from the analysis of commercial reading systems. In order to examine other educators' thinking and study relevant to adult basic education, the researcher undertook a review of literature in the field.

## Delimitations

This thesis is not an experimental study, nor is it a rigorous examination of the reading issue. Its

intent is not to prove a hypothesis but to describe changes in various assumptions.

There are too many variables in an on-going program to find conclusive support, in a statistical sense, for any hypothesis. Since no attempt was made to control variables, it was difficult to determine which factors made for the success of some students and the failure of others. Rather, basic assumptions about literacy training were in a sense tested in a practical situation where many variables were at play.

## Definition of Terms

illiteracy: Anderson and Niemi (1969) define the complete illiterate as one who is unable to read, write, or figure at the grade-one level.

functional illiteracy: Anderson and Niemi (1969) define the functional illiterate as one whose competence in reading, writing, and mathematics does not extend beyond grade five.

the Dacum method: The Dacum (Developing a Curriculum) procedure of curriculum building defines and measures skill development in terms of behavioral objectives. An organizational sequence which is considered necessary to attain these objectives is presented in chart form. (Nova Scotia Newstart, 1972).

The goal of the Dacum method is to meet individual needs in terms of curriculum, learning style, learning ability, learning rate, and availability for training. To accomplish this goal the learner is to be self-directed. That is, he is to orient himself with the assistance of an instructor to the self-training process. This means that the learner can attempt any one of a number of skills on his level and can select from a number of modes and media. The role of the instructor is to develop labs (learning activity batteries relevant to each skill), to assist the student when he is having a problem and to evaluate achievement. Testing is undertaken when a student feels he has mastered the contents of a skill block, at which time he is tested in his ability to perform the skill.

traditional methods: These methods are usually associated with teacher-centered programs. They could include individualized instruction, group instruction, or both. The teacher directs the learning process through close interaction with the student to ascertain his needs and to prescribe programs.

## Plan of the Study

Chapter I introduces the problem, historical background, purpose, procedures, and delimitations of the study.

Chapter II presents a review of selected literature pertaining to adult basic education. A connection

between the conclusions drawn from the literature and the suggested methodology is made in Chapter IV by way of summary statements where they are applicable.

Chapter III outlines the procedures by which the research team arrived at a methodology for literacy instruction and an analysis of selected commercial reading systems. In addition, it describes the methods by which this researcher provides a record of the experimental literacy program.

Chapter IV describes the development, operation, and evolution of the functional literacy program in Yarmouth, Nova Scotia, from March 1971 to September 1972.

Chapter V provides an analysis of a selected variety of commercial reading systems suitable for adult literacy students. Here the analysis is presented in tabular form, with the complete, detailed analysis of the systems contained in Appendix B.

Chapter VI describes a workable methodology which was finally arrived at by the research team after sixteen months of experimentation.

Chapter VII concludes with a summation of the discoveries made by the research team and makes recommendations for the implementation of future programs.

# CHAPTER II

# A REVIEW OF LITERATURE PERTAINING TO ADULT BASIC EDUCATION

## Introduction

A review of literature pertaining to adult basic education was undertaken during the evolution of the program in functional literacy described in this thesis. The more urgent became the necessity to modify the original hypotheses underlying the program, the more clear became the necessity to find out what other researchers had discovered. While a search for studies specific to adult literacy was emphasized, other areas of the literature proved fruitful, and indeed necessary. It was not intended to undertake a rigorous examination of the debate over reading methods, but rather to examine various aspects of functional literacy: psychology of adult learning, adult basic education, methodology, media, testing, and remedial reading. Considerable overlap within these areas was in fact discovered, making it sometimes impossible to separate the results of the research into distinct categories.

The majority of the studies reviewed during the course of this literature search supported the conclusions which the research team had already drawn.

# Adult Basic Education in General

## The Need for Adult Basic Education

Undereducated adults include the complete illiterate who has had no formal schooling and consequently is unable to read, write, or figure, and the functional illiterate whose competence in those skills does not exceed the grade five level (Anderson and Niemi, 1969). Adult basic education is designed to meet the needs of such adults by providing them with functional competence in reading, writing, and mathematics. The governments of both Canada and the United States have enacted legislation to set up programs for undereducated adults. Lacking basic education and vocational skills, these adults cannot function in the economic world. Lacking basic social skills, they do not know how to sell themselves. Therefore, they need special training so that they can become candidates for vocational training and economic viability.

## Goals of Adult Basic Education Programs

Adult basic education programs fall into two main areas: literacy and basic skill development. The problem of literacy, as Coles (1967) suggests, is not to make people literate but to keep them literate. To realize this goal, Coles makes two recommendations: (1) that programs concentrate on those adults who want to be

literate because they know they can use these skills, and (2) that literacy should never be regarded as an end but as an introduction to other areas of learning.

Orata (1950) cautions that the training period for literacy must be long enough so that people learn to read with understanding and critical thought; otherwise literacy is useless, if not dangerous. This view is supported by Gray (1966), who envisions much broader goals for literacy training than the mere improvement of reading skills. He feels that literacy training should equip a person to meet the practical needs of daily living and to become a responsible member of society.

The other area of basic education, basic skill development, requires a grade five reading level as a prerequisite. Skill development programs provide instruction in communications, mathematics, and sometimes science and/or life skills. Successful completion of a program is prerequisite to job training or vocational skills programs, although the level of completion may be anywhere from grade six to twelve.

Because not all jobs require the same level of literacy, Edgerton and Blum (1954) devised a literacy scale, which, although old, is still relevant. The scale was based upon an analysis of job duties requiring various degrees of skill in reading, writing, and

mathematics tasks. At the illiterate end of the scale are listed jobs that need no reading, writing, or mathematics: painting, sanding, starting a machine by pushing a button. At the literate end of the scale are listed such jobs as reading packing instructions, handling cash transactions, and interpreting manuals. Such a scale is of interest and value to anyone involved in planning upgrading programs.

There is a general consensus on what is needed in order for adult basic education programs to reach the goal of making their students literate and providing them with enough skills to pursue a vocation. As outlined by Lanning and Many (1966) these needs are:

1. Research on the kinds of programs suitable for adults.

2. Realistic planning.

3. Trained teachers.

4. Provisions for medical referral and vision and hearing correction.

5. Psychological services.

6. Counselling services to provide pre-program, in-program, and post-program counselling through the cycle of recruitment, training, job placement, and follow-up of the trainee.

Research in Adult Basic Education

Both Knox (1967) and Anderson and Niemi (1969) found that there were very few studies dealing with adult basic education which are based on carefully designed research. The twenty-four studies that Anderson and Niemi found did, however, seem to verify the potential of the disadvantaged for further education and to suggest that personalized instruction is most effective. In his report of fifty-one studies in the literature, Knox found that only a quarter of them were pure research studies, and most of those were conducted using primitive methods of data collection and analysis and an elementary rationale. Consequently, he concluded that there are few substantial generalizations that can be supported by any one or a combination of the studies in his report. However, he generalizes on nine points regarding adult basic education that seem to be supported by available research:

1. Most illiterates can make progress toward functional literacy if minimal procedures, adequate time, and moderate interest are available.

2. It is difficult to identify functional illiterates accurately.

3. Adults with low levels of literacy tend to have reading proficiencies two to three years below their

school-leaving level.

4. The crucial problem in adult education is to reach these adults, through understanding the major influences on readiness and motivation.

5. There are few tests that have been developed or adapted for use with illiterates. This is a major restriction on program development and research.

6. There is a shortage of appropriate high-interest, low-reading-level materials for adults.

7. There is little evidence of the effectiveness of various instructional systems that have been specifically developed for adult basic education.

8. When teachers carefully follow an instructional system, little evidence exists to indicate that the level of education of the teacher is associated with learner progress.

9. Adult basic education has been insufficiently related to other areas of competence, such as job and family life.

## Profile of the Adult Learner

### Vision

Kidd (1959) and Bischof (1969) both agree that there is a general decline in visual function and a steady decline in efficiency in specific visual functions with

age. Bischof adds that too little attention has been paid to the implications of this decline, and to the need of older people for greater illumination for reading.

<u>Hearing</u>

The consensus seems to be that adults gradually lose the ability to hear. Bischof (1969) states that most authorities agree that the ability to hear high-pitched sounds is lost first, and usually after the age of forty. Craik (1965) found that the majority of adults rarely lose the full ability to hear low-pitched tones, even though the ability to listen or audit declines in efficiency with age. Kidd (1959) further points out that there is a decline with age in the ability to translate and react to sounds.

<u>Mental Ability</u>

There are no simple answers to the question of whether intellectual capacity increases or decreases with age. Birren (1968), in his review of the aspects of aging and intellectual functioning, found that little is known about the distribution of mental ability as it varies with age. One of the problems in discussing adult mental ability is measurement. Bischof (1969) flatly condemns most I.Q. tests as child-oriented and not adequate for measuring adult intelligence. Hendrickson (1966) has pointed out that when adults are given tests on special abilities, they show loss with age on items

unrelated to adult life, such as digit-symbols and nonsense syllables, but show little or no loss--even gains--on items dealing with vocabulary and general information, and on items depending on judgment or experience. Further, Bromley (1966) contends that verbal, practical, affective, cognitive, and social skills are perhaps better indicators of an adult's mental ability than I.Q. scores.

In discussing the problem-solving abilities of adults, Bischof (1969) concludes that "an old dog can learn new tricks", but he may be reluctant to do so if he is not convinced of their value. Berg (1966) supports this view by pointing out how quickly housewives and unskilled workers learned complicated trades during wartime, when there was very strong motivation to do so.

While Bischof (1969) suggests that an older person might not learn as rapidly as he did in the past, Hilliard (1966) cites the case of an education center in Chicago where adults were learning at three times the rate of speed of children.

Hendrickson (1966) concludes that the evidence indicates that it is not ability but speed of performance which declines with age. Kidd (1959) concurs, suggesting that there may be psychological reasons (such as greater concern with accuracy) as well as physiological reasons for the decline in speed with age. He further points

out that ". . . a test conducted with a time limit supports the conclusion that there is a steady decline with age. But when a test is employed where time is not a factor, there is no significant decline associated with age (p. 84)."

Hendrickson (1966) suggests that age may even produce advantages in the learning process. Adults have accumulated experience and knowledge, have concentrated on a few selected goals, have a strong urge to learn, have good work habits and good judgment.

Aging affects memory. Lawson (1965) tested three groups for differential changes in auditory and visual short-term retention: young, middle-aged, and elderly adults. The results indicated that all subjects found it more difficult to handle visually presented information as opposed to orally presented information. He found that the decline in visual retention increased with age, being most noticeable after the age of sixty. Bischof's review (1969) indicates that most of the studies on aging and short-term memory came to the same conclusion as did Lawson.

Psychological Characteristics Affecting the Learning Process

Fay (1964) identifies five psychological characteristics that can affect the learning process of the typical adult: underestimation of one's own potential

ability; need fulfillment; conformity and inhibition; specialized interests; and fear of failure. However, Fay claims that such adult needs as community and economic status, vocational achievement, and success as parents will motivate adults to set specific goals for themselves and to learn.

Other studies on the undereducated adult's motivation to learn are less optimistic. Kidd (1959) suggests that hearing and vision losses may have such a marked influence upon a person's lack of self-confidence that he may become convinced that he cannot learn new things. Niemi and Davison (1971) observe that because many undereducated adults have experienced constant failure in life, they have low expectations of success. This view is supported by a study of the Adult Basic Education Program of Illinois done by Greenleigh Associates (1965). They measured the anxiety experienced by adults before enrollment in an education program. They found that 22.3 percent of the adults tested believed that they would be too "dumb", 29.9 percent believed that they could not really learn, and 30.6 percent believed that they would feel foolish.

Kidd (1959) outlines four facets in the personality structure of adults which are important for the educator to understand:

1. The adult learner will react to all experience as he sees it.

2. This reaction will be as an organized whole and not in fragmented parts.

3. Through the learning process, the adult will be consciously attempting to satisfy his needs as he sees them.

4. The behavior of the learner can only be fully understood through an awareness of his point of view.

Differences Between the Child and the Adult Learner

Basically, adults differ from children in terms of experience. Kidd (1959) mentions three related notions: adults have had more experiences; they have different kinds of experiences; their experiences are organized differently. Burnett (1966) and Coles (1967) add the consideration that adults come to the learning process as volunteers, and thus have made sacrifices for which they are impatient to see an immediate return. Burnett emphasizes that the problems and pressures of adults are greater than those of school children.

In terms of the reading process, the adult illiterate probably has a different speaking and listening vocabulary from the child who may be at the same reading level. As Burnett (1966) points out, an adult has almost certainly been exposed to reading instruction. Therefore,

what he previously learned piecemeal may, with minimal teaching, suddenly fall into place, thus accounting for the unusual gains in reading proficiency which adults sometimes make.

## Methodology in Adult Basic Education

### Inconclusiveness of Research

Many studies have been undertaken to determine which methods and techniques are suitable for teaching adults. One of the chief problems cited in most of the studies was the lack of test instruments to evaluate program effectiveness. Most of the tests used had been normed on the average achievement of grade school populations. Barnes and Hendrickson (1965) state that the grade equivalent concept as derived from such tests is not valid for adults, and that until tests are specifically designed for the undereducated adult, the teacher's judgment will continue to be the primary source of evaluation.

Lorge (1954) points out that a further problem in evaluating method is that the literature allows every teacher to find support for any method, and that even though more than one hundred studies of contrasting methods have been undertaken, no conclusions can be drawn about the adequacy of any one method. Lorge goes on to point out that a method in itself has no intrinsic

value or superiority: the use of the method is the important thing. The onus is on the teacher to use the method that he feels, on the basis of his knowledge and experience, will be most successful. Coles (1967) adds a word of caution about highly sophisticated methods. They often fail, he says, not because they are incorrect but because often they cannot be adapted to meet the realities of a situation where, perhaps, average and below average teachers cannot cope with them.

Gagne (1965) reports that although individual aptitudes are among the most important independent variables in the studies of complex learning, many studies of learning under different modes of instruction simply have assigned students randomly to two or more treatments, compared the average performance according to some criteria, and found no significant difference.

Individual versus Group Instruction

After an analytical review of evaluation research, Niemi and Anderson (1969) concluded that ". . . education and training programs designed for disadvantaged adults must be personal, informal, and individual. In short, the mass educational approach must be abandoned in favor of primary group relationships in the learning situation (p. 92)." Lanning and Many (1966) found similar results in a study they conducted on programs for disadvantaged

adults; all teachers were in agreement on the necessity of highly individualized instruction for adults.

Although individualized instruction may imply that teaching takes place on a one-to-one basis, this is not necessarily the case. Rather, individualized instruction is instruction which meets the unique needs of the individual. It assumes that each individual is different in terms of interests, purpose, personal needs, values, and methods of thinking and learning. Clymer and Kearney (1962) caution that individualized instruction should not be equated with individual teaching or tutoring. Every classroom requires that both group and individual instruction be carried out.

Barbe (1961), in speaking of reading programs, agrees that the term "individualized" is unfortunate, since it implies that group activities are not part of the program. He suggests that the term "personalized reading program" be used instead, because it stresses individualization, as opposed to a basal reading program, which is group-oriented and includes much more group instruction. Groups in a personalized reading program, Barbe claims, ". . . are established on a temporary basis and designed to meet immediate needs (p. 65)."

Coles (1967) believes that for adults individual tuition and a close teacher-learner relationship are

essential. He adds that the small group has the advantage that learners take encouragement from participating with others, so long as embarrassing competition is avoided. Hunyard (1966) claims that adults, particularly older ones, are inclined to do best in groups of "similars" with whom they can identify. They do not want to be isolated, nor do they like competition from younger people.

Some authors (Gray, 1966; Hayes, Lighthall and Lupton, 1966; and Murphy, 1955) emphasize the social aspects of grouping. Gray contends that ". . . grouping brings students together in a social situation and relates the efforts of each to the needs and aspirations of the group as a whole (p. 205)." Murphy claims that the concept of an isolated individual engaged in solitary learning ignores the social factors which give learning context and meaning. He feels that the individual learns in relation to others, in relation to himself as part of the group. Kidd (1959) agrees that the opportunity for reaction and questioning is imperative if learning is to be effective. He further points out that it has often been said that all learning is a dialogue.

Hayes, Lighthall and Lupton (1966), in interviews with teachers on grouping, found that teachers spoke of the positive benefits of a small constant group within

the big group, whatever the basis for grouping. A number of adult educators interviewed stated that ". . . some of the insecurity from loss of pride suffered by these people in admitting that they could not read or write in the literate age was relieved in realizing that others suffered similar inadequacies (p. 352)."

Programmed Instruction

Some authors claim that programmed instruction is ideally suited to adult education. Hunyard (1966) gives several reasons for this view;

> 1. The information to be learned is broken into small, logically arranged segments. One small step is presented at a time, and, then, only after the previous segment is understood. Relationships are easier to see and understand. The learner, in effect, is finding-out-for-himself.
> 2. The learner proceeds through the information at his own rate according to his ability. . . .
> 3. The learner is active. He must, manually in most cases, operate the machine and he must constantly respond mentally to proceed. . . .
> 4. He is constantly reinforced by applying in the next frame the correct information he has acquired. Consequently, the relearning of incorrect responses is minimized.
> 5. Our adult learner works alone. He is insulated from competition from his peers, younger or older. Because he works individually, distractions are minimal (p.78).

Warren (1970) points out additional advantages of programmed instruction: it allows pacing; it is good for heterogeneous grouping; it takes over many routine jobs of the teacher, like drill and practice, leaving time for individual help; it provides a step-by-

step record of the student's progress. Gagne (1965) observes, however, that individualized teaching in the form of programmed or computer-based instruction appears not to reduce the effect of individual differences, as it was originally hoped.

Bertrand (1964) observed that the majority of inmates at the Texas Department of Correction preferred programmed learning to conventional instruction. McKee *et al.* (1967) conducted research at the Draper Correctional Institution which showed that programmed instruction gave better results than conventional instruction. The study used teaching machines and programmed instruction for the experimental group and teacher-centered instruction for the control group. After 40 hours of reading instruction, along with 160 hours of remedial instruction alone, the mean gains in reading level were 2.39 for the experimental group compared with 2.27 for the control group. In total gain, the experimental group achieved a 1.37 mean grade gain compared to 1.05 for the control group. These differences were statistically significant.

Similar results were reported by McKee (1967) in another study using teaching machines and programmed instruction for the experimental group. After 40 hours of reading instruction, the experimental group achieved

an over-all grade level increase of 2.5 compared to 1.1 for the control group.

## Media

### Media Research

Thomas (1968), in discussing media, cites McLuhan as insisting that each medium is a special form with its own characteristics or structure, and is neither better nor worse than any other medium. Yet much of the research pits one instructional medium against another to see which is best in terms of the learning process, without concern for individual responses to these media. Briggs (1967), in an interest group session on educational media, succinctly summed up the debate over the priority of various media by observing that it is not sensible to ask whether motion pictures are more useful than are textbooks or programmed instruction without specifying more useful for what. In the same interest group session, the selection of media to establish effective learning conditions was discussed. It was concluded that at that time there were no principles to indicate what media were appropriate to particular types of learning or particular subject matter. Another problem discussed by the group was the description of media to indicate their appropriate applications to learning situations, a problem recognized as fundamental to research

and theory.

After reviewing more than two thousand reports on media research, Briggs (1967) observed that the research suffered from lack of precise procedures and from lack of selection of significant problems for study. He went on to state that very few of the studies which compared one method or medium with another demonstrated significant differences. He suggested that the studies may have shown no differences because they did not sufficiently take into account the facts that (1) no one method is appropriate for all types of learning, and (2) the media compared may not have been of equal quality.

In just such a study as Briggs reviews, Geeslin (1969) found no statistically significant difference in achievement between students using experimental multimedia materials and those using traditional materials.

Wade (1969) describes a study skill center for English and mathematics set up in the Los Angeles school system. This center was designed as a pilot project to raise the educational achievement of disadvantaged students through individualized instruction. A multimedia approach was used, including electronic equipment and carrels, for the experimental group. The experimental group improved significantly at the .05 level over the control group, which did not use the center. The results indicated that there would be greater improvement in the

educational achievement of disadvantaged students if they were taught with a similar variety of hardware and software.

In agreement with these findings, Kidd (1959) reports that a variety of media seem to have a greater effect than a single medium or method, probably because a greater number of sensory channels are being used in the learning process. Briggs (1967) also points out that the new media increase the possibility of satisfying the different learning needs of individuals.

Although research shows that little is known about the teaching effectiveness of various instructional media, their use as aids should not be discounted. Certain authors (Clymer and Kearney, 1962; Herr, 1963; Lorge, 1954; Spache, 1961; Tyler and Brownell, 1962) have stressed that all media are designed to aid, not to replace, the teacher.

In terms of reading, Spache (1961), Herr (1963), and Wade (1969) have pointed out that teaching devices enhance the performance of students on rote and drill tasks and help develop comprehension, vocabulary, and speed because of the repetition of material and immediate feedback. However, Wade observes, these devices do not seem to produce better learning when it comes to assimilation or to relating separate skills to reality. Here the

teacher or some kind of interpersonal exchange seems to be necessary.

Media for Adult Literacy

Barnes and Hendrickson (1965) reported that the United States Office of Education Task Force, in its review and appraisal of existing instructional materials in the field of adult basic education, found a serious shortage of materials for teaching reading skills. They also found that the existing material did not take into account the sophistication or the interests of the intended reader, nor were they written on a functional level.

Greenleigh Associates (1966) conducted a field test and evaluation of four adult basic education systems: (1) American Incentive to Read (AIR); (2) Science Research Associates (SRA); (3) Allied Educational Council (Mott); (4) Follet Publishing Company (System for Success). The study involved 1,500 functionally illiterate adults, aged 18 and over. Some of the teachers were trained, others were college graduates, and some were high school graduates. No significant difference in student gain in scores among reading systems was found. No one reading system proved to be better than any other.

Furthermore, Spache (1961) and Burnett and Winkley (1966), in talking about basic reading instruction for the adult learner, claim that, despite their widespread

use, there is no conclusive evidence that reading machines or programmed materials are superior to other methods of teaching reading. On the other hand, Kent (1971) undertook a study to determine the effectiveness of a multi-media, multi-modal, multi-level approach with illiterate adults. The experimental group, which used the multi-media approach, showed a significantly greater gain in reading and comprehension skills than did the control group which used a teacher-textbook approach.

Some educators hold the belief that child-oriented materials should not be used with adults. The National University Extension Association (1967a) stresses the use of programmed instruction and related educational technology, which, they claim, will remove the adult from the child-oriented classroom where he experienced failure. In another bibliography, the National University Extension Association (1967b) observed that the division of adult education programs of the United States Office of Education affirms that adults should not use child-oriented materials because they are ego-destructive and do not apply reading and computational skills to the needs of adults in an adult world.

## Teachers

### Importance of Teachers to Learner Success

All authors reviewed felt that good teachers were

the most important factor in learner success. Barbe (1961) explains that a good teacher can usually make any program work, while a poor teacher can be ineffective with the best program. Tyler and Brownell (1962) concur with this estimate, even going so far as to say that it is the teachers who determine the success or failure of any program. Burnett and Winkley (1966), in speaking of reading instruction, point out the ironic fact that as more and more "scientific", "teacher-proof" materials are produced, more and more sophisticated teachers are needed to use them effectively.

There is much debate on what type of teacher should teach adult literacy. Burnett (1966) observes that the experience of the elementary school teacher often equips that teacher with the skills to teach reading to adults. However, he notes that some educators advocate that literacy teachers not be public school teachers on the grounds that they are unlikely to be able to empathize with culturally underprivileged adults. The research team in a study by Barnes and Hendrickson (1965) observed that the teachers who appeared to be the most successful in terms of student progress and achievement were able to identify the goals responsible for bringing the students to class and sought to help the students achieve these goals as soon as possible.

In their model of the analysis of training adult basic education teachers, Niemi and Davison (1971) outline the knowledge, skills, and attitudes the adult basic education teacher should have. (See Appendix C.)

Teacher Training

Burnett (1966) and Davison (1969) agree that an adult literacy teacher must be knowledgeable about the total reading process and must have the training and experience to teach illiterate adults. Davison points out that research indicates that this training should be in the areas of reading, linguistics, psychology of learning, instructional media, cultural influences, and research. To this end, Newton (1965) outlines the aims of a program to train teachers, who he advocates should be volunteers. The program should help the volunteer reading tutor to develop an understanding of (1) the importance of reading in a highly literate society; (2) the conceptual and linguistic disadvantages of culturally deprived youth and adults as they relate to problems of learning; (3) the phonological, morphological, syntactical, and vocabulary problems involved in learning to read English; (4) the scope and sequence of the basic skills in developmental reading; and (5) the various ways to adapt a basic technique of reading instruction to a broad spectrum of materials and students.

## Summary

The goal of adult basic education should be to help adults become and stay literate and skilled so that they can function to the best of their ability in the economic and social world. Because there is no conclusive evidence that any one method or medium is intrinsically superior to another, more research needs to be done on program effectiveness. Research does indicate, however, that informal, personalized, individualized programs are the most effective with adults.

Individual needs can be met on a one-to-one basis or in a small group with common needs. Programmed instruction is useful for adults because it is self-pacing and offers immediate feedback and continual success. Grouping, as long as it is not threatening or embarrassing, is considered to facilitate learning through the benefits of interaction.

Although any medium, properly used, can be a powerful aid to effective instruction, a variety of media has a greater effect than a single medium. Above all, the empathetic, skilled teacher is the most important variable in learner success.

Declines in vision and hearing with age necessitate special consideration for the adult learner. Although he needs considerable motivation and considerable encouragement

to help him overcome his lack of self-confidence and his fear of failure, the adult learner has as much ability to learn as he had when he was younger.

# CHAPTER III

# METHOD OF RESEARCH

## Introduction

During the development and operation stages of the functional literacy program, the research team analyzed commercial reading systems, developed and tested ideas and materials used by students, and kept records of the data collected. For the purposes of this study, this researcher organized the data collected by the team, synthesized it into a suggested methodology for literacy instruction, and designed a model for the array of data from the analysis of commercial reading systems.

## Procedures for Data Collection and Analysis

### Development Stage

A research team of four teachers, including this researcher, was hired by the Adult Vocational Division of the Department of Education to develop and implement a functional literacy program designed by Nova Scotia Newstart. During the development stage the research team, directed by two education consultants from Nova Scotia Newstart, did a preliminary analysis of a wide variety of commercial systems, matching appropriate material from each system with each skill block on the literacy chart. (See Appendix D.) Each researcher kept a written record of the particular systems

he analyzed. During this analysis, certain patterns emerged. These were also recorded.

Operation Stage

During this period, on-going development and implementation took place. The researchers took turns concentrating on the development of ideas and materials which were then tested by the whole staff, using them with students. As material was analyzed and used, it was incorporated into a catalog system. In using the material with students, the staff discovered further patterns and characteristics of the systems.

Each researcher kept detailed lesson plans of resources used, levels at which they were used, and methods by which they were used. In addition, the researchers wrote lesson sequences and skill sequences.

The staff held daily conferences to discuss the problems associated with development and implementation and to exchange ideas and information resulting from the students' use of materials. Each researcher kept conference records.

During the operation stage it was decided to administer entry, progress, and exit reading tests. (See Appendix A.) This testing was done so that a possible evaluation of the program could use these scores to provide some empirical data regarding its effectiveness. This evaluation was not completed, but the research team considered that substantial progress in reading scores supported the team's line of development.

Because it is not within the scope of this study to compare these test scores, no attempt will be made to present and analyze them in the text.

Procedures for the Synthesis of Data

It has been the intent of this researcher to organize and synthesize data collected from March 1971 to September 1972 into a suggested methodology for literacy instruction and an analysis of selected commercial reading systems. To this end, the researcher followed these procedures:

1. Collected the records kept by the research team.

2. Collected the data kept in the catalog system used by the Literacy Training Center at Yarmouth.

3. Consulted with research team members.

4. Reviewed the literature pertaining to adult basic education.

5. Devised a model by which to array data from the analysis of commercial reading systems and the records kept by the research team.

The data collected by the research team are developed in Chapter IV. They are synthesized into an analysis of reading systems in Chapter V and into a suggested methodology for adult literacy in Chapter VI.

## CHAPTER IV

## A DESCRIPTION OF THE DEVELOPMENT OF A LITERACY PROGRAM

### Initial Development

#### The Need for a Literacy Program

In 1967, Nova Scotia Newstart was incorporated according to an agreement between the Province of Nova Scotia and the federal government. The function of the corporation was to design and conduct studies of the socially and economically disadvantaged and to develop and evaluate programs designed as experimental solutions to some of their problems.

One of the projects of Nova Scotia Newstart (1969) was to study, in consultation with Jackson Associates, the human resources of Yarmouth County. The study found a high illiteracy rate in Yarmouth County.

In 1967 the Department of Education became interested in the problem of literacy when, under a Federal-Provincial agreement (The Adult Occupational Training Act), Nova Scotia was empowered to develop programs to upgrade adults. These programs were called Basic Training in Skill Development. The purpose of such programs was to raise the basic education of adults so that they could, in a year or less, either obtain employment or meet the requirements of a vocational training course.

Momentum for the development of literacy programs in particular picked up in 1970 when the Department of Manpower and Immigration carried out surveys on people seeking employment. The surveys indicated that many adults were being kept out of the labor market because of their illiteracy. Consequently, in 1970 Nova Scotia Newstart together with the Adult Vocational Training Division of the Department of Education decided to develop and operate a functional literacy program.

The Design of the Program

The program was based on a literacy training analysis chart developed in February 1971 by a committee which included two reading specialists from the Nova Scotia Teachers College, two representatives from the Nova Scotia Department of Education, two representatives from Prince Edward Island Newstart, and two consultants from Nova Scotia Newstart. The committee identified the major skills associated with literacy: speaking, non-verbal communication, listening, reading, and writing. It then identified general areas of competence associated with each of these skills. Approximately two hundred behavioral components of these general areas of competence were identified and arranged on a chart in probable learning sequence. (See Appendix D) This chart became the curriculum format for the literacy program. As far as is known, this program was the first that

used systems analysis technique to define the behavioral skills of literacy.

## Objectives of the Program

The objective of the program was to bring students to a grade six reading level in a year or less so that they could continue upgrading in a Basic Skill Development Program and subsequently enter the labor market or vocational training. This was to be accomplished by meeting individual needs in terms of curriculum, learning style, learning ability, and learning rate.

## Preliminary Analysis of Commercial Reading Systems

A team of four reading instructors was hired by the Adult Vocational Training Division of the Department of Education to develop a program based upon this behavioral analysis. They were to be assisted by two education consultants from Nova Scotia Newstart.

The analysis consisted of breaking down reading systems and coding selected components according to the skill blocks on the chart. These components were called learning activity batteries or labs. The resources were listed according to skill blocks in five catalogs entitled Speaking, Non-Verbal Communication, Listening, Reading, and Writing.

## Difficulties Encountered during the Preliminary Analysis

Some areas of the chart were too general; others too specific. When the research team broke up commercial

systems to fit the functional analysis, their sequence and rationale were destroyed.

Since grade levels were not attached to the labs, instructional materials were often "dumped" into the labs, with the result that the same material was often listed for students at different levels of achievement in reading.

Proposed Methodology

When a student entered the program, he was to be assessed through informal placement tests developed by the staff. Those skills the student already had were crossed out on the literacy chart. The learner was to be self-directed; that is, he was to orient himself with the assistance of an instructor to the self-training process. The learner could attempt any one of a number of skills on his level and could select resources from a number of modes and media. The role of the instructor was to develop labs, assist the student when he was having a problem, and evaluate the student's achievement. No one instructor was responsible for any particular student.

Proposed Evaluation System

The evaluation system consisted of a check-off scale, marked in the skill blocks of the chart. An "X" denoted self-achievement in workbooks and assignments. The instructor made an initial assessment of individual skills by observing the learner's performance in working through

labs directly related to that skill. Achievement was to be indicated by the learner's successfully working through one lab. A "+" denoted successful application in higher skills, based on instructor observations of several instances of successful application. A "0" denoted that the learner was able to generalize the skill to the point where he was using it in instances not specifically associated with the programming in the lab. Initially, the "θ"indicated that the student had that skill when he started the program.

If lower level skills were not retained, the instructor traced back through the connecting linkage until the lower level problem skill was uncovered. After remedial work on that skill, the student attempted upper level skills again.

## Initial Operational Phase

It was planned that in May 1971, after ten weeks of development work, six students would enter the program for a trial run of six weeks.

Subsequently, every six weeks six more students would enter the program until the full complement of thirty-six students was reached.

Operational difficulties arose almost immediately because the proposed methodology was not workable in terms of adult literacy. Under the proposed methodology no one

teacher was to be responsible for any particular students. A student was to choose what skill he wanted to work on, guided by anyone he wanted to ask. This arrangement was unworkable on two counts. First, the student had no idea of what he needed or wanted to learn. It was impossible for students who ranged from total illiteracy to grade five reading level to read or interpret the chart and then find the appropriate material for a particular skill. Second, no one teacher was keeping track of each student's learning.

It soon became apparent that most students did not function in a totally individual situation and that students could not learn the basic literacy skills in isolation. In such a situation students received little drill. Students often failed to make generalizations unless they were stressed by an instructor either in a group or in a one-to-one situation. The self-discovery, self-teaching concept did not seem a valid way for illiterates to learn how to read.

The proposed evaluation system was too subjective, impractical, and time-consuming. The definition of each evaluative mark was nebulous, and the overall picture gained by the marking was extremely confusing.

The proposed methodology was based on certain assumptions inherent in a self-training process, which the research team found faulty in terms of illiterate adults:

1. That the student has the ability, insight, and

confidence to read and interpret the chart, to recognize his needs, and to find the right directions towards his goals.

2. That the student is able to read and comprehend the directions telling what is expected of him.

3. That a student working through a learning activity battery has a conception or understanding of how such material is related to the skill block.

4. That students and teachers ought to interact only when the student recognizes that he has a problem.

5. That all students function optimally in totally individualized environments.

6. That all skill blocks should contain material that can be done individually.

7. That each component of communication skill can be taught as an isolated, separate entity.

8. That getting right answers is synonymous with learning.

## Evolution of the Program

### Revised Assumptions

After the six-week trial run, the research team based the revised line of development on the following assumptions that were arrived at through experience, observation, student feedback, and daily conferences to assess the program:

1. That students need a structure, either one they

have created for themselves or one created by or with the teacher, within which they can express their needs and goals and help define the kind of learning environment they want.

2. That the program must be flexible and adaptable so that the learning environment and resources can be matched to the learning style of the students.

3. That the literacy chart analysis is not functional as a curriculum. Rather, the analysis is a powerful tool which the teacher can use for diagnosis and remediation in teaching reading.

4. That skills cannot be absolutely isolated but must be taught in units. A person has to deal with most of the components of reading in order to read a single sentence.

5. That certain skills should be introduced over and over again.

6. That a learner needs help in recognizing patterns. Mechanical workbook exercises, machines, and programmed instruction are not sufficient. Patterns and concepts and "learning how to learn" tricks must be pointed out by instructors. An instructor interacting with a student has the capacity to realize when the student is floundering and can intercede--a machine does not.

7. That all commercially available resources were designed (in most cases explicitly so stated by the

publishers) to aid, not to replace, the teacher.

8. That the teacher is the single most important variable in learner success. Student-teacher, student-student interaction offers more potential for learning experience and information than student-resource. In addition, interaction allows the teacher to assess the learning style of the student and where and why the student has problems.

Changes Based on Revised Assumptions

The chart as a student curriculum gave way to an enumeration of skills to be used as a teacher guide to literacy. The skills analysis was the basis for a catalog system which functioned as a reference both for resources and methodology. There were six catalogs representing separate overall areas of competence: Phonetic Analysis, Structural Analysis, Comprehension (Listening and Reading), Vocabulary, Writing and Spelling, and Use of References. Each skill under the overall areas of competence was defined sufficiently so that an instructor knew exactly what it involved. Where it was felt advisable, various rules and suggested methods were indicated right on the catalog pages. Each resource in these catalogs had been tested with students and was therefore entered with an approximate level (grade) of difficulty or use. In addition, many resources were entered with additional comments based on the research team's experience. Listing each resource

on a separate page allowed ample room for further comments as other instructors used the resources. Also, because each resource was on a separate page with a flexible numbering system (1a, 1b, 1c, etc.), catalogs could be effortlessly expanded as new material was analyzed and tested with students.

The catalogs were designed to be teacher aids rather than student guides. This shift in emphasis reflected the experiences leading to the conviction that the teacher, rather than the student, could best profit from the analysis of reading skills. From such an analysis, a teacher could synthesize and organize the reading skills which should be taught at various levels. (See Appendix E.)

These six catalogs were sufficiently developed to be in use by the spring of 1972. Through analyzing reading programs, breaking them down according to an analysis of reading skills, cataloging them, using them with students, the research team was able to arrive at a basis for the Analysis of Reading Systems.

Methodology

Each of the four instructors began to be responsible for particular students, planning a program and keeping records of skills attempted and resources used. Eventually this grouping procedure was refined so that students in each of the four groups fell within certain grade levels: totally illiterate, grades 1-2, grades 2-4, grades 4-6. Each instructor was responsible for a group of students,

who were instructed individually. This arrangement had certain advantages. Each instructor had a specific level to concentrate on; he could then become more familiar with problems and techniques applicable to that level. Also, because the teacher was repeatedly using certain materials, he had time not only to assess the usefulness and effectiveness of the material but also to create his own materials at that level. Any new material was added to the catalogs and shelved with the other resources.

Eventually, one instructor started a basic phonics class which included students from all groups. The class proved immensely popular with the students. Subsequently each instructor started a reading and writing class for his group. The time the group spent together depended on the discretion of the instructor and the demand of the students. Generally, approximately one-half the student's time was spent in a group.

These classes were a great success. Each instructor could interact with his students, and they with each other, and carry on informal evaluation which was helpful in planning individual lessons and remedial work. These classes provided an opportunity to develop concepts and patterns and to share experiences. Each student had more instructor time. The classes allowed for immediate feedback and gave students the necessary repetition of certain sub-skills without the boredom of listening to a tape over and over again or doing

exercises in a book.

Classes were excellent for diagnostic work. Through constant dialogue in the classroom and the exercises assigned, the instructor could readily identify specific problems. Patterns and generalizations could be pointed out that would not necessarily be pointed out in a text. Students were not lock-stepped. They could be reading as much as two grade levels apart and still benefit from the same lessons, since everything is inter-related in reading.

The remainder of the student's time was spent on an individualized program planned by the teacher. The student was given a copy of his program in a record book, which he kept in a folder along with his other material. He worked on his program at his own rate and in whatever order he pleased, coming to the teacher for necessary help. When the student finished this program, it was marked by the teacher and given back to the student for correction. Any necessary remedial work was assigned. The instructor kept a record file for each student in a master file.

If a student progressed faster than the rest of his group, he simply moved into another group. The Gray Oral Reading Test was administered as a progress test every two months or when an instructor felt that a student was ready to move up to the next group.

Not all students worked in groups. A few could and did choose to work alone for most of the time. These few occasionally joined group activities.

Originally, the program design obliged the students to work on a particular skill using specified resources. The staff decided to change this procedure and let the student work through reading systems which presented a sequence of skills. Working from resource to skill did not waste time. If a student spent five minutes doing something again that he had already learned, the "loss" of time was more than compensated for by the positive reinforcement of finding the exercise easy and being able to do it correctly. Furthermore, repetition is often beneficial, since certain sub-skills need to be continually repeated.

If a student did not acquire a certain skill working through a reading system or systems, then he spent time working on an individual skill.

Evaluation

On the advice of a consulting psychologist, the research team decided to use the following tests:

1. Spache Diagnostic Reading Scale--administered on entry and exit.

2. Gray Oral Reading Test, Forms A, B, C, D--administered on entry and after approximately every two months of training.

Although these tests are classified as children's tests, they were used because reading is essentially the same process whether adults or children are learning to

read. They were used for three reasons:

1. Reading tests are powerful diagnostic tools in preparing individual programs.

2. Since students graduated to a Basic Training in Skill Development module when they could read with adequate comprehension at the grade six level, their progress needed to be assessed objectively.

3. In the interest of having the program evaluated eventually, the staff wanted to collect data on student progress. (See Appendix A.)

The research team concluded that it was advantageous if the teacher directed the learning process rather than oriented the students to a self-training process. By working closely with students, both individually and in groups, the teacher could diagnose, prescribe programs, point out generalizations and patterns, as well as interact with students. Further, it was discovered that reading skills could not be absolutely isolated but must be learned in units along with other reading skills. Rather than functinning as a student curriculum, an analysis of reading skills is a useful tool for teachers who must diagnose and remediate reading problems.

# CHAPTER V

# ANALYSIS OF SELECTED COMMERCIAL READING SYSTEMS

## Introduction

Because the literacy program was experimental, many materials were tried. Not all materials were found to be equally suitable for the program's purposes. However, all materials that were used extensively, even if they were not equally successful, are contained in the Analysis of Reading Systems presented in this chapter.

The systems overviewed are representative of the range of those available, from the large, inclusive systems like Mott Basic Language Program and Learning 100, to those which concentrate on a particular area of literacy, like Reading for Concepts or Basic Goals in Spelling. Child-oriented materials, like the Ginn Word Enrichment Program, and adult material, like Programmed Reading for Adults, are represented. The systems represent a variety of approaches because variety has been found to be a necessary part of individualized instruction.

Originally the research team did a preliminary analysis of selected commercial reading systems. The analysis sought to find appropriate material from each system for each skill block on the literacy chart. (See Appendix D.) During this analysis the research team

noticed certain patterns emerging. Certain systems emphasized decoding skills, others comprehension. Some systems included spelling and writing; others did not. By using the material with the students, other characteristics emerged: strengths, weaknesses, uses, reading levels. In daily conferences the research team discussed the characteristics of various systems and kept records of observations and judgments made during sixteen months of experimentation. Based on these records, this researcher arrived at a model for the analysis of commercial systems. Such an analysis has three functions:

1. To enable teachers to familiarize themselves with materials appropriate to an adult literacy program.

2. To present an overview from which teachers can choose appropriate instructional materials for specific skill areas.

3. To provide a model for the analysis of any new reading system adopted by a literacy program.

## The Analysis Outline

Each commercial system was analyzed according to a specific outline, which is described below.

### Overview of the System

The overview presents the scope of the whole system along with a list of the various parts or titles, their coding system, and the grade level range as suggested by

the author.

Analysis of the System

Format.--The form in which the material is presented (e.g., programmed workbook, filmstrips, etc.) Some systems, like Learning 100, encompass many different formats.

Focus.--An enumeration of what aspects of communication skill are emphasized.

Strengths.--The research team's criteria for judging the usefulness of a system were these:

1. Adult content or adult interest. Not all material designed for children was rejected. Indeed, it could not be, as there is a paucity of materials for adults. The research team found that much child-oriented material is not at all childish or offensive to adults.

2. Suitable content for Canadians. Because most of the available materials are American, the research team found that many of them were so American-oriented--often ghetto-oriented--as to be puzzling to students.

3. Clarity of instruction. Because much of the student's time was necessarily to be spent working alone, the research team looked for materials whose instructions were easy to follow.

4. Over-all quality. The research team tried to select materials which were, according to the team's

knowledge and experience, linguistically and pedagogically sound.

Weaknesses.--The converse of Strengths. If the team experienced no weaknesses in a system, or anticipated none, none were assigned.

Suggested Uses.--Based primarily on how the materials worked successfully for the literacy program. Occasionally a suggestion comes not from direct experience, but from a projection from similar material.

Cautions.--Since the teacher should always be sufficiently familiar with the material to be able to use it to its best advantage, the cautions given are merely suggestions based on the team's experience.

Appropriate Grade Level.--The authors of reading systems usually (not always) suggest what grade/reading levels their materials cover. The team's suggested levels are often at variance because of the nature of the crash course type of program, where the adult tries to accomplish in a few months what the school-child normally does in several years. Therefore, some of the materials, in the team's opinion, can be useful for a wider range of grade levels. (Elementary phonetic analysis, for example, can be used with students who can function at a grade four or five level as well as with beginning readers--with a different approach, of course.)

Also, the team felt that some material was beyond the level that the authors indicated. Such variance is due to the nature of the program, which tries to bring a functionally illiterate adult up to a level where he can cope with a basic education course leading to vocational training, a grade six <u>reading</u> level. <u>Reading</u> level is emphasized. The research team found that writing skills and general knowledge did not keep pace with reading development. Therefore, reading (and writing) exercises which a grade six child going to school at a leisurely pace could reasonably be expected to perform would be beyond the scope of an adult concentrating, under the pressure of time, on the rudiments of reading at a grade six level.

Because the students in the program were supposed to be brought up only to a grade six reading level, grade levels above that are not specified. If in fact the materials transcended grade six, this is indicated as "6+".

## Systems Analyzed

Fifteen systems were analyzed according to the outline. (See Appendix B for the complete analysis.) The information contained in the analysis is reduced here to tabular form for convenient reference. The category labelled "Cautions" did not lend itself to tabular-

ization and is therefore omitted.

The systems analyzed, together with publication information, are here listed in alphabetical order according to the name of the system. The shortened name by which each system is referred to in the tables is written in parentheses.

1. Allyn and Bacon Readers. Boston: Allyn & Bacon Inc., 1969. (Allyn & Bacon)

2. Basic Goals in Spelling. Kottmeyer, W., Ware, K., & Purvis, N. M. Toronto: McGraw-Hill, 1965. (Basic Goals)

3. Cracking the Code. Don Mills, Ontario: Science Research Associates, 1968. (Cracking the Code)

4. Ginn Word Enrichment Program. Boston: Ginn & Company, 1968. (Ginn)

5. Help Yourself to Read, Write and Spell (Books 1 and 2). Loesel, W. G. Palo Alto, California: Educational Development Corporation, 1965. (Help Yourself)

6. Language Master Program. Cleveland: Bell & Howell, 1970. (Language Master)

7. Learning 100. Huntington, New York: Educational Development Laboratories, 1965. (L-100)

8. Lessons for Self-Instruction in Basic Skills. Monterey, California: California Test Bureau, 1966. (LSI)

9. Mott Basic Language Program. Galien, Michigan:

Allied Educational Council, 1969. (Mott)

10. New Streamlined English Series (Parts 1 and 2). Laubach, F. C., Kirk, E. M., & Laubach, R. S. Syracuse, New York: New Readers Press, 1966-1970. (New Streamlined)

11. Programmed Reading for Adults (A Sullivan Associates Program). Buchanan, C. D. Toronto: McGraw-Hill, 1966-1968. (Programmed Reading)

12. Reader's Digest Services. Don Mills, Ontario: Thomas Nelson & Sons (Canada), Ltd., 1958-1969. (Reader's Digest)

13. Reading for Concepts. Liddle, W. Toronto: McGraw-Hill, 1970. (Reading for Concepts)

14. Reading Laboratory Series. Parker, D. H. Don Mills, Ontario: Science Research Associates, 1960. (SRA)

15. System for Success (Book 1). Henney, R. L. Chicago: Follet Publishing Company, 1965. (System for Success)

Most of the items contained in the tables are self-explanatory. Where there is the possibility of ambiguity, a footnote is added for clarification. Because some of the systems analyzed are multi-media, two designations are used in the tables: a "T" denotes that the item indicated is relevant throughout the system; a "P" denotes that the item indicated is relevant to only part of the multi-media system.

TABLE I - FOCUS

| | A<br>Phonetic Analysis | B<br>Structural Analysis | C<br>Comprehension (Reading) | D<br>Comprehension (Listening) | E<br>Vocabulary | F<br>Reading Speed Development | G<br>Writing (Manuscript and Cursive) | H<br>Writing (Composition) | I<br>Spelling | J<br>Grammar and Punctuation | K<br>Concept Development | L<br>Reference Skills | M<br>Leisure Reading |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Allyn and Bacon | | | T | | | | | | | | | | T |
| 2. Basic Goals | T | | | | | | T | | T | | | T | |
| 3. Cracking the Code | T | | | | | | | | | | | | |
| 4. Ginn | T | T | | | T | | | | | | T | T | |
| 5. Help Yourself | | | | | T | | T | T | T | T | | | |
| 6. Language Master | T | T | | | T | | | | | | | | |
| 7. L-100 | P | P | P | P | P | P | P | P | | P | | P | |
| 8. LSI | | | T | | | | | | | | | T | |
| 9. Mott | P | P | P | | P | | P | P | | P | | P | |
| 10. New Streamlined | T | T | T | | T | | T | | T | | | | |
| 11. Programmed Reading | T | T | T | | | | | | | | | | |
| 12. Reader's Digest | | | T | P | T | | | | | | | | |
| 13. Reading for Concepts | | | T | | T | | | | | | T | | |
| 14. SRA | T | T | T | P | T | P | | | | | | | |
| 15. System for Success | T | T | | | | | T | | | T | | | |

A - Involves the sounds making up a word; the phonology. For example, the sound of "ea" in "bean".

B - Involves the composition of the whole word: the breakdown into syllables, meaningful prefixes and suffixes; the morphology. For example, the composition of "in-vit-ing".

P - Relevant to part of the multi-media system.

T - Relevant throughout the system.

TABLE II - FORMAT

| | A Programmed Instruction | B Semi-Programmed Workbooks | C Workbooks | D Text, with Exercises | E Readers | F Kits | G Filmstrips | H Cassettes | I Audio-Visual |
|---|---|---|---|---|---|---|---|---|---|
| 1. Allyn and Bacon | | | | | T | | | | |
| 2. Basic Goals | | | T | | | | | | |
| 3. Cracking the Code | | | P | | P | | | | |
| 4. Ginn | | | T | | | | | | |
| 5. Help Yourself | | | T | | | | | | |
| 6. Language Master | | | | | | | | | T |
| 7. L-100 | | | P | | | P | P | P | P |
| 8. LSI | T | | | | | T | | | |
| 9. Mott | P | P | | | | | | | |
| 10. New Streamlined | | | P | P | P | | | | |
| 11. Programmed Reading | T | | | | | | | | |
| 12. Reader's Digest | | | P | | P | | | P | |
| 13. Reading for Concepts | | | | | T | | | | |
| 14. SRA | | | | | | T | | | |
| 15. System for Success | | | | T | | | | | |

B.- Only parts of the workbooks are programmed; that is with answers immediately visible.

D.- Contains explication which the student is expected to be able to read for himself.

P - Relevant to part of the multi-media system.

T - Relevant throughout the system.

TABLE III - STRENGTHS

| | A<br>Written for Adults | B<br>Interesting to Adults | C<br>Wide and Interesting Variety | D<br>Well Organized and Sequenced | E<br>Clear, Simple Instructions | F<br>Good Reinforcement | G<br>Provision for Self-Correction | H<br>Needs Little Teacher Assistance | I<br>Especially Helpful Teacher's Guide |
|---|---|---|---|---|---|---|---|---|---|
| 1. Allyn and Bacon | | T | | | | | | | |
| 2. Basic Goals | | | | T | | | | | |
| 3. Cracking the Code | | T | | T | | T | | | T |
| 4. Ginn | | T | | T | T | T | | T | |
| 5. Help Yourself | T | | | | | | | | |
| 6. Language Master | | | | | | T | T | T | |
| 7. L-100 | T | | T | T | | T | P | P | |
| 8. LSI | | T | T | T | T | T | T | T | |
| 9. Mott | T | | T | T | T | T | T | T | |
| 10. New Streamlined | T | | | T | | T | | | |
| 11. Programmed Reading | T | | | T | T | | T | T | T |
| 12. Reader's Digest | P | P | T | | | | | | |
| 13. Reading for Concepts | | T | T | T | T | T | | T | T |
| 14. SRA | | T | T | T | T | T | T | T | |
| 15. System for Success | T | | | T | | | | | T |

B - Differs from Column A in that the material is not designed for adults, but it is nevertheless interesting to them.

C - Skills are reintroduced in many and various ways. They are not merely taught one-by-one, in relative isolation.

G - Answers are provided in the student material; not necessary to refer to teacher or teacher's edition.

P - Relevant to part of the multi-media system.

T - Relevant throughout the system.

## TABLE IV - WEAKNESSES

| | A Too child-oriented | B Exercises Tedious | C Instructions Difficult for Students | D Limited Amount of Material and/or Exercises | E No Provision for Self-correction | F Mechanical Difficulties | G Insufficiently Graded | H Too American and/or Urban Ghetto-oriented |
|---|---|---|---|---|---|---|---|---|
| 1. Allyn and Bacon | | | | | | | | T |
| 2. Basic Goals | T | T | T | | T | | | |
| 3. Cracking the Code | | | | | T | | | |
| 4. Ginn | | | | | T | | | |
| 5. Help Yourself | | | | | T | | T | |
| 6. Language Master | | | | | | | | |
| 7. L-100 | | | | | | P | | P |
| 8. LSI | | | | | | | | |
| 9. Mott | | | | | | | | P |
| 10. New Streamlined | | T | | | T | | | |
| 11. Programmed Reading | | T | | | | | | |
| 12. Reader's Digest | P | | | | T | | | P |
| 13. Reading for Concepts | | | | | | | | |
| 14. SRA | | | | | | | | |
| 15. System for Success | | | | T | | | | |

A - Much of material taught is irrelevant to adults; characters in stories are children with children's interests.

D - Material provided gives only an introduction to a particular skill; not sufficient to perfect that skill.

F - Problems with hardware: difficulties with machine operation, frequent repair, continual maintenance.

G - Grade or reading levels not clearly assigned; no clear progression from level to another.

H - American history and biography and stories centered around life in an urban ghetto in the United States are puzzling to rural Canadians for whom they have no relevance.

P - Relevant to part of the multi-media system.

T - Relevant throughout the system.

TABLE V - SUGGESTED USES

| | A Independent Work | B Small Group Work | C Remedial Work | D Sight Vocabulary Development, Especially for Non-readers | E Reading Speed Development | F Basis for Discussion | G Cultural Enrichment | H Source of Teacher Materials | I English as a Second Language | J Independent Leisure Reading |
|---|---|---|---|---|---|---|---|---|---|---|
| 1. Allyn and Bacon | | | | | | | | | | T |
| 2. Basic Goals | | T | T | | | | | | | |
| 3. Cracking the Code | | T | T | | | | | T | | |
| 4. Ginn | T | T | T | | | | | | | |
| 5. Help Yourself | T | | T | | | | | T | T | |
| 6. Language Master | T | | T | T | | | | | T | |
| 7. L-100 | P | P | P | P | P | | P | | | |
| 8. LSI | T | | | | | | | | | |
| 9. Mott | T | T | T | P | | | | P | P | |
| 10. New Streamlined | | T | T | | | | | | | |
| 11. Programmed Reading | T | T | T | | | | | | | |
| 12. Reader's Digest | | | | | | P | P | | P | T |
| 13. Reading for Concepts | T | T | | | | T | T | | | |
| 14. SRA | T | T | | | P | | | T | | |
| 15. System for Success | | T | T | | | | | T | | |

A - Skill development which can be undertaken by the student with a minimum of teacher assistance.

B - Skill development which is best handled in a group situation with a teacher.

C - Skill development for those who are weak in some, but not all, skills at a lower level than their overall reading level.

H - Especially rich source of materials, in the form of extensive word lists, supplementary exercises, interesting ideas which can be adapted.

J - Differs from Column A in that materials are best used purely for leisure reading, not for specific skill development.

P - Relevant to part of the multi-media system.

T - Relevant throughout the system.

TABLE VI - APPROXIMATE READING LEVELS

| | * Author's Classification: Non-reader (0) | Author's: 1 | Author's: 2 | Author's: 3 | Author's: 4 | Author's: 5 | Author's: 6 | Author's: 6✝ | Adjusted for Adult Programs: Non-reader (0) | Adjusted: 1 | Adjusted: 2 | Adjusted: 3 | Adjusted: 4 | Adjusted: 5 | Adjusted: 6 | Adjusted: 6✝ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Allyn and Bacon | | | T | T | T | T | T | T | | | T | T | T | T | T | T |
| 2. Basic Goals | | T | T | T | T | T | T | T | | T | T | T | T | T | T | T |
| 3. Cracking the Code | | | | | T | T | T | | | T | T | T | T | T | T | |
| 4. Ginn | | T | T | T | T | T | T | T | T | T | T | T | T | T | T | T |
| 5. Help Yourself | | | | | T | T | T | T | | | T | T | T | T | T | T |
| 6. Language Master | T | T | T | T | T | T | T | | T | T | T | T | T | T | T | T |
| 7. L-100 | P | T | T | T | T | T | T | P | P | T | T | T | T | T | T | P |
| 8. LSI | | | | T | T | T | T | T | | | | | T | T | T | T |
| 9. Mott | P | T | T | T | T | T | T | P | P | T | T | T | T | T | T | T |
| 10. New Streamlined | T | T | T | T | T | T | | | T | T | T | T | T | T | | |
| 11. Programmed Reading | ---NONE GIVEN--- | | | | | | | | T | T | T | T | T | T | T | T |
| 12. Reader's Digest | | T | T | T | T | T | T | T | P | T | T | T | T | T | T | T |
| 13. Reading for Concepts | | | T | T | T | T | T | T | | | T | T | T | T | T | T |
| 14. SRA | P | T | T | T | T | T | T | T | P | T | T | T | T | T | T | T |
| 15. System for Success | | T | T | T | T | T | T | T | | T | T | T | T | T | T | T |

* In some cases, the research team's classification differs from the author's classification because of the nature of the short-term adult program. (See further explanation on pages 53 and 54.)

6✝ Because the range of the adult literacy program extended only to grade six, material that transcended that level was not assigned a specific level.

P - Relevant to part of the multi-media system.

T - Relevant throughout the system.

## CHAPTER VI

## SUGGESTED METHODOLOGY FOR ADULT LITERACY

### Introduction

No one approach to reading is effective for all the problems of all students. However, researchers such as Anderson and Niemi (1969) suggest that informal, personalized, individualized programs appear to be the most effective for adults. Furthermore, most researchers reviewed in Chapter II pointed out the importance of the teacher in the learning process. Although there is no conclusive evidence that any one method is intrinsically superior to another (Lorge, 1954; Briggs, 1967), there is a general consensus that a variety of media seem to have a greater effect than a single medium or method.

The education consultants originally hypothesized that a multi-media, multi-modal system would be superior to other systems, limiting the necessity for a teacher. Because the research team found such a system could not replace the teacher using it, another dimension had to be added to the program, a dimension that could be considered traditional: teachers directing the learning process. All authors reviewed felt that good teachers were the most important factor in learner success. Tyler and Brownell (1962) and Burnett and Winkley (1966) concluded that any

programs or materials are only as good as the teachers using them. Consequently, the following guide is directed at inexperienced and untrained teachers who need some material and techniques around which they can create or adapt their own style. Suggestions are based on the observation and judgment of a research team of teachers who, after sixteen months' experience--rethinking, trying and failing, trying and succeeding, adapting--arrived at a workable methodology.

Generalizations on Program Planning

Physical Environment

The following learning environment worked very well in an individualized literacy program:

1. Open areas for group activities. In these areas hexagonal tables proved very functional. These tables were divided into two parts with three sides each. They could be put together in any number of ways depending on the group composition or purpose.

2. Closed areas for small-group, quiet activity. This type of area would be ideal for individual carrels.

3. Carrels. These were located around the walls so that students could have their own private working areas. Then students could cut down on audio-visual distractibility and establish their own climate for learning. Ideally, there should be a carrel for every student so that he could have his own individual, permanent place.

4. Audio-visual room. It proved convenient to have all hardware in one place. Here students could engage in group activities such as watching an instructional unit on the television monitor or listen to an individual lesson on an audio-tape using headphones.

5. Classrooms. Classroom space, depending on the number of teachers using it, required some scheduling. Permanent fixtures included a blackboard, maps, hexagonal tables.

6. Library. This was stocked with magazines and books at all levels. Students could go there at their leisure.

7. Good illumination throughout the areas. This is in keeping with the findings of Kidd (1959) and Bischof (1969) that there is a steady decline in efficiency in specific visual function with age.

Consultation with Students

After the student had been given a Spache test to determine not only his reading level but also his particular types of problems, the instructor could begin to plan a program for him. Planning a reading program is always best done in consultation with the student: not, of course, to ask his advice, for the student can have none to give, but to elicit from him what particular wishes or feelings he might have. Many students, for example, express a strong desire to learn to spell. Some want only to bring up

their reading level as quickly as possible so they can proceed with their trade training. A few students prefer working alone to being in a group. Some students want the challenge of a "hard" (high level) group; others want the security of a lower level group. The particular emotional needs of the student are as important as his academic needs in planning his program. Both needs should be constantly reappraised, as often as every week.

Another reason to plan with the student is to explain why he is doing each aspect of the work and to make him feel that he is indeed being treated as a separate, important individual. At this point it should be impressed upon the student that he need never be reluctant to seek help, to question the value of the work he is doing, or to request changes in his program. The instructor should be aware, however, that many students are reluctant to seek help and need much encouragement from an instructor in order to build their self-confidence to the point where they feel free to speak out.

Consultation is in keeping with the findings of various authors (Fay, 1964; Hendrickson, 1965; Lanning and Many, 1966), who emphasize that realistic planning, identification of the goals that bring students to a program, and help in achieving these goals are important variables in terms of student progress and achievement.

Also because of the fear of failure, as outlined by Fay (1964), Kidd (1965), and Greenleigh Associates (1965), it is important that adults be helped to gain self-confidence.

Problems Caused by the Limitations of Time and the Background of Disadvantaged Adults

The time factor affects the nature of instruction. Children have six years to accomplish what adults are expected to do in a year or two. The result is that grades must be compressed into a shorter time period. Adults must be exposed to certain skills, especially decoding skills, through drill until consolidation takes place and responses are unconscious and automatic. Burnett (1966) points out that reading that was previously learned piecemeal may, with minimal teaching, fall into place, thus accounting for the rapid gain often made by adult students.

Because many disadvantaged adults have had limited formal schooling, they have missed much general information and book learning which may be taken for granted by the educated teacher. This fact is particularly important in terms of concept formation, comprehension, and reading vocabulary. Adults must therefore be exposed to new concepts in a variety of situations.

Writing and spelling do not keep pace with reading without hard work. To compound the problem, many adults

will not attempt writing because they feel they cannot spell well enough. Their reluctance is a difficult obstacle to overcome, both for the student and the teacher. If a student is a non-reader, he can better be taught writing and spelling because they can be taught simultaneously with reading.

Since most students will never have the time to become truly literate writers in the "composition" sense, the teacher must concentrate on functional writing skills.

Disadvantaged adults often come from backgrounds where reading was not part of the family's life-style. As a result, books were rarely found in the home. People from such an environment have learned to get along without reading. When they enroll in a government literacy program, reading suddenly becomes very important to their economic survival. This pressure often compounds the fear of failure they already have.

Nature of Instruction

The final methodology that evolved for this program was based on individualized instruction. This means the matching of instruction to the needs of the individual student and includes tutorial instruction, assigned work, independent study, peer instruction, and group instruction.

Individual needs can be met in groups by organizing groups with similar needs, supplementing group instruction

with individual help, and transferring individuals from one group to another as the need arises. Through working with a group, a teacher can find areas of weakness and prescribe individual programs. In the group, there must be enough repetition so that no one is lost, but the group must move. The less capable can be cued. If someone is behind, he can be given extra help and review during the independent work period. Success must always be present, even if contrived. Every student's weaknesses must be recognized and his strengths capitalized upon. If necessary, strengths must be created.

The social aspects of grouping are very important for students. Certain authors (Murphy, 1955; Gray, 1956; Hayes, Lighthall and Lupton, 1965; Coles, 1967) point out that in a group with similar needs and aspirations the group provides identity and encouragement.

The close contact between student and teacher ensures the greatest possible progress regardless of the method or materials used. The constant reappraisal and flexibility of programming avoids "lock-stepping". Only by working closely with a student can a teacher really recognize the individuality of his learning style, his problems, and his temperament, and make recommendations and changes accordingly. In fact, all the authors reviewed felt that good teachers were the most important

factor in learning success. Certain authors (Barbe, 1961; Tyler and Brownell, 1962) felt that a good teacher can make any program work. Coles (1967) believes that for adults this close teacher-learner relationship is essential.

## General Lesson Plans

### Overview

At all levels, it is important that each daily program contain a balance among the various areas of literacy: word attack skills, comprehension, vocabulary, and writing. Naturally, the balance will vary with the needs of the student, and a few students may not need word attack skills at all.

Teaching form without meaning, word attack skills without context, should be avoided at all costs. It is erroneous to think that a student can be taught all the phonetic analysis skills in a particular sequence, then all the structural analysis skills, then all the comprehension skills, and so on, and come out literate. The word attack skills are simply the means to an end, and the end is comprehension. One reads in order to understand, not in order to utter sounds. Therefore, even at the very beginning levels, context should be built into every lesson.

In planning a student's independent work, phonetic

and structural drill should be assigned sparingly, as this type of thing is usually much better handled in a class, with a teacher pointing out patterns, and the group providing the stimulation. It may be useful, of course, to give certain students extra drill for remediation, but even there, it is probably best for the teacher to work with the student alone.

It is better to plan too much than too little. If the pace is too fast, it will soon be evident. Whatever independent work is assigned to a student should be closely supervised. Not only should the instructor spend enough time with the student to get him properly started, but he should also check with him at least daily to make certain that he is continuing to work successfully and to give him that vitally necessary praise and encouragement. As Coles (1967) and Burnett (1966) point out, adults come to the learning process as volunteers, and thus have made sacrifices for which they are impatient to see an immediate return.

The instructor should also talk with the student about the work he is doing in order to ascertain whether he really understands it or not. Just because a student is getting the right answers does not mean he is learning. It is very easy to follow a pattern without internalizing it to the extent that it carries over or becomes an

automatic response. This is especially true with decoding skills.

Only a basic outline of instruction will be suggested here because every student, every group, every teacher is different. A general lesson plan for a typical week's work for three levels will be described to show the skills and techniques involved at these levels.

## The Non-Reader

### Vocabulary

Sight vocabulary should be built immediately and as fast as possible. Various approaches can be used, depending on the group. The experience approach seems to work only if the group feels a bond: they have the same occupation, they live in the same district, they grew up together. However, some groups and individuals do not feel at all secure in this kind of approach. They want to learn to read books, not words "out of their heads". So perhaps it is best to start with controlled vocabularies, at least initially. Where possible, picture clues should be used as a crutch. However, there should be a progression from the picture and word to the word alone.

The Dolch (1949) Basic Sight Vocabulary Cards contain 220 words most commonly found in school reading.

This list is a good source of controlled vocabulary. Students can write ten words from the list on flash cards. Students in pairs or threes can quiz each other on reading the words and, for those who want to try it, can write the words from memory or simply copy them. When the student can recognize these ten words by sight, he should start ten new words.

Decoding Skills

With beginners it is best to start with the sound and recognition of the lower-case manuscript letters, followed by the upper-case manuscript letters. It is important to start with the manuscript letters for two reasons: they are similar to the printed letters the students will be reading, and they are easier to master than the cursive letters. The New Streamlined English Series (Laubach), Book 1, is particularly good for beginners, since it presents a sound for each letter in a familiar word with a picture clue as well as teaching sight vocabulary through repetition in sentences and stories. So as soon as the student learns a few words, he is reading. This is quite an ego-booster for adults. From the start, students should be encouraged to recognize alphabetical order, since it will be important for later work: dictionary skills, using a telephone directory, and so forth.

Recognition of letters can be reinforced by the use of the typewriter, which students can use to type out letters in alphabetical order.

One should be cautious with phonics. It is often hard for adults to isolate sounds, particularly the short vowels. In a group situation each new phonic element should be taught with simple, patterned words so that each new element is emphasized. It is best not to confuse the issue with other elements. For example, if the student has been introduced to initial and final consonants, and then to short vowels, he should not be given words with different elements (like "stack" , with a consonant blend) to practise the short "a" sound. Instead of using a straight "sounding out" approach, it is better to introduce sounds through word families (i.e., short "a", as in "at, bat, cat, hat, mat, fat, sat").

It should be pointed out to students that if they do not recognize a word immediately, they can: (1) Sound it out by sounding out the letters and blending them or start by sounding out the vowel and adding the final consonant, and then adding the consonant to the front. Or a student can try it the other way around, sounding out the initial consonant and vowel, adding the final consonant. (2) See if the word looks like a word he knows. How does it differ? (3) Guess at the word from context.

Comprehension

Reading for meaning should be included from the beginning. Care should be taken to ensure that students know the meaning of the words in their sight vocabulary. Comprehension exercises should start with recalling information. Often comprehension is difficult for beginning readers because they are concentrating so hard on the mechanics of reading. Therefore, rapid word recognition should be developing by using the Learning 100 system's Flash-X and Tach-X machines.

Since word-by-word reading affects comprehension, students should be encouraged to read in logical thought units or phrases. This can be done by rewriting stories with a phrase per line, assuring, of course, that all the words in the story are in the student's sight vocabulary. The teacher could read for students as a model on a tape which the student could listen to. Students could practise alone and in the group.

Writing and Spelling

Writing should start immediately, first with copying and as soon as possible, composing. Before composition starts, students should have approximately fifty words in their sight vocabulary. Writing could be encouraged by having students make up oral sentences, using the sight words they have learned. Helpful words,

such as the personal pronouns, could be listed on the board. The sentences could be copied on the board by the teacher and read in class. The sentences could then be cut into words and the words copied on flash cards by the students. The students could then use the words to make up a story, each contributing a sentence while the teacher writes it on the board. This affords an opportunity to point out the format of a simple sentence: space between words, capital at beginning, period or question mark at the end. The story could then be read aloud and the students could copy it.

Dictation can be used at this level. Before the dictation, the words to be dictated should be written on the board and gone over with the students. Any words they cannot get should be supplied. Volunteers could write sentences on the board.

Encourage students to memorize spellings from the beginning. Later, when they learn more word patterns, they can spell according to patterns. If students feel confident enough, short sentences can be dictated , using their sight vocabulary words.

## The Student Testing at the 2-3 Level

### Sight Vocabulary

At this level there still may be a few words on the Dolch List which some members of the class do not know.

The list can be expanded as the teacher discovers more and more words which the student should now recognize by sight. A variation on showing and reading flash cards could be used. Several word cards are selected at random. Each student is instructed to do one of the following, depending on which is appropriate to the word he selects:

1. Read the word and ask another student to write it (e.g., "your").

2. Read the word and give one or more rhyming words (e.g., "other").

3. Read the word and give another one which begins with the same sound (e.g., "these").

4. Read the word and add an ending (e.g., "stop").

5. Make up a sentence using one or more of the selected words.

6. Write the sentence the teacher makes up using several of the selected words (e.g., "Are <u>these</u> <u>your</u> <u>other</u> pants?").

<u>Comprehension</u>

<u>Reading for Concepts</u> is an excellent series to use for concept formation and vocabulary and comprehension development. A typical lesson might be as follows:

1. The list of vocabulary words from the story to be read should be gone over, for meaning as well as

recognition.

2. Each student should read a sentence aloud, the better students reading a little more. However, this difference should not be obvious. Sometimes the oral passages can be made about equal in length, saving any extra passage at the end for a fluent reader or for the teacher to read. The teacher should make note of any mistakes or any vocabulary to be discussed later.

3. The students should answer the comprehension questions on paper by themselves, bringing them to the teacher for checking as they finish. They should not be corrected but directed to read again if a mistake is made.

4. When everyone is finished, but not all corrected, the questions can be gone over together. The poorer students should be asked the easier questions. The teacher should not indicate whether an answer is right or not until everyone has confirmed whether or not he agrees. Then the students can debate the issue, with the teacher stepping in only if they cannot resolve it.

5. Any vocabulary that might be new should be gone over, showing related words. For example, "prehistoric": the prefix "pre" can be introduced with prefix, preview, pre-heat, pre-cook, pre-shrunk.

Decoding Skills

General Review.--One technique is to take a short passage from a selection just read by the group, focussing

on any misread words which may relate to previous phonics lessons. For instance, the group has had "-s", "-es", "-ed" endings pointed out to them, and they still often leave them off. This would be a very common error for a French speaker. The passage can be reread, having the student(s) pick out all the words with these endings, rereading the appropriate sentences as they find them.

Introduction of Long Vowels with Words Ending in "-e".--It should be explained that each of the vowels (a, e, i, o, u) has another sound (this has been said before, of course): the long sound, and this is much easier to hear than the short sound because it sounds like the name of the letter.

1. As each long vowel is named, the students are asked to give words which contain that sound. On a paper, not on the board, the teacher should mark down only those which are one-syllable and have the pattern CVCe (consonant, long vowel, consonant, final e). Then those which can be paired with a short vowel (e.g., hate, hat) can be selected to illustrate what the final "e" does.

2. A sheet of such pairs should be distributed:

| Column A | Column B |
|---|---|
| hat -- hate | rat -- |
| pan -- pane | man -- |
| . . . | . . . |

The students read the pairs in Column A. They then <u>write</u> the words with final "e", completing Column B, after which they read the pairs they have just completed.

3. At this point homonyms should be introduced, because undoubtedly any list of monosyllabic pairs will produce them: for example, man -- mane (main, Maine). The students should be asked the meaning of the spoken word. Then the second (and third) meaning should be elicited, and the different spellings shown. The students could be challenged to figure out the sound-spelling pattern, but it should not be emphasized until later.

<u>Writing and Spelling</u>

The emphasis should be on functional writing: dates, addresses, places, names, notes to family, and so forth.

After the class has had lessons in contractions and forming words with "-ing" endings, and in writing simple notes, the rules for forming "-ing" words should be reviewed and the students asked to spell on paper:

hoping
stopping
coming
going
letting

Then contractions are reviewed and the students asked to spell on paper:

he's
I'll
don't
we're
didn't

Then this dictation can be given:

> I'm going shopping. I'll be back at 5:30.
> Please start cooking the dinner. We'll have
> __________ and ____________. (The students
> fill in whatever they like.) Ask the children
> to set the table.
>
> Love,

The students could then write a note to their wives (or husbands) telling them where they have gone and when they will be back, and giving her (him) some directions. They may ask for any assistance, either from the teacher or from each other. This should be corrected as they write: it is psychologically better to correct by giving assistance than to "judge" the final product.

The Student Testing at the 4-5 Level

Vocabulary

At this stage, the development of meaning vocabulary is more important than the development of sight vocabulary: synonyms, multiple meanings, getting meaning from context.

This procedure can be used daily:

1. Each student contributes one new word, from his independent or class reading, whose meaning he did not know even after he sounded it out. He copies the sentence in which he found the word and underlines the word.

2. The instructor collects the sentences,

chooses those words which would be useful to the students to learn, adds other illustrative sentences and adds related words, using roots and affixes. He then copies the edited list of words and sentences for distribution to the students.

3. The following day, the instructor goes over this edited list, pointing out related words, prefixes and suffixes.

4. The students use them in sentences orally.

5. Each day, old vocabulary is reviewed briefly.

Decoding Skills

Each lesson should include review and expansion. For instance, if the phonics lesson for the past two weeks had been on long vowel sounds made by a double vowel (e.g., "ee", "ea", "ai", "oa") and homonyms (e.g., "rode"/"road"), the students could be asked to write the following sentences from dictation:

He ate beets.
The meat is really cheap.
The maid rode down the road.
What ails the pale male? Too much ale.
I heard the plane as plain as day.

These sentences should be corrected in class. If anyone wants to put a sentence on the board, he should be encouraged to do so, but no one should be required to. No one should be expected to get everything correct, as these are not spelling words which are supposed to have

been learned. However, correct spelling seems to come more easily when words are used in context rather than in lists.

Writing and Spelling

At this level the emphasis is on the sentence, with capitalization and punctuation. Independent writing should be encouraged. (See recommendations for Case #7 on page 89.) Group work should include such practical writing as filling out various forms which adults are likely to encounter, making out checks and deposit forms, addressing envelopes, writing simple letters.

Reference Skills: Using the Dictionary

The dictionary is a complete mystery to most adult literacy students, but once they have had some practice with it--preferably with a junior edition, such as the Winston Canadian Dictionary for Schools--many seem to really enjoy using it. The Ginn Word Enrichment Program (Books 6 and 7) has an excellent section on using the dictionary. The following lesson is based on material in Ginn (6):

1. The students examine the sample dictionary on pages 64-65.

2. The teacher asks them what kind of information can be found in this dictionary. All the kinds possible should be elicited. Such information as parts of speech

may have to be supplied.

3. Alphabetical order is the first stumbling block to be overcome. Most students have great difficulty with this. Pages 66-68 should be done together, with supplementary exercises, such as are found in Mott 600A, pages 17-19. Parts of each page should be done in the group, the rest as independent work.

4. Guide words should be introduced next, with group instruction throughout. It is important not to rush. Alphabetical order and the use of guide words have to be completely mastered before going ahead with other dictionary skills. The assigned homework can either be done individually or in pairs or groups, as the students prefer. With adults, there is very little danger of one student doing the work and the others copying, if the teacher establishes an atmosphere of cooperation.

## Typical Reader Patterns--Recommendations

### Introduction

It is not within the scope of this thesis to discuss remediation of all types of problems. Farrald (1971) is an excellent source of just such discussion, with a minutely detailed categorization of learning disabilities. However, the research team found certain cases to be typical of adult literacy students. Each

case will be outlined, together with recommendations.

Case 1.--The word-caller: the student who can read almost anything aloud correctly, but whose comprehension is very poor.

Recommendations.--The student should be given absolutely no independent work which involves word-attack skills and excused from group work which deals exclusively with phonics. However, he should be included in a group where he can shine as an oral reader, and use the group discussion of the reading to enforce his concentration and, hopefully, his comprehension. He should be asked simple questions. His confidence should be built up before advancing to more difficult questions. His independent work should involve materials which strengthen comprehension.

Case 2.--The student for whom English is a second language. This does not mean immigrants who have problems which require special teaching, beyond the scope of a literacy program, but those French-speaking students who have spoken English all their lives but as a second language. They manage English so well that one is apt to overlook the fact that they may have some slight problem with aural comprehension and they may have a smaller English vocabulary than the native speaker. They certainly have grammatical differences.

Recommendations.--In giving such a student an oral reading placement or progress test, those misreadings which are the result of dialect differences (e.g., a French-speaker would probably read "he talks" as "he talk") should be ignored. Otherwise, he may be placed at too low a level. If his pronunciation differs from the norm of the group, this difference should be allowed for in phonics lessons, and the differences pointed out for the enlightenment of the whole group. It should be made clear from the approach that these differences are interesting, not something to be overcome. Perhaps the teacher can demonstrate that his own accent is different in some respects, or that everyone in the class is a little different from everyone else. If it is suspected that the student has trouble with aural comprehension, his work should always be checked as he starts it to make sure he has understood the spoken instructions. His independent work should include listening tapes or working in conjunction with a partner who speaks only English.

Case 3.--The student who has great difficulty with phonics. Everyone must internalize some phonetic analysis skills in order to read: one cannot sight-memorize all the words in a language. However, if a student simply cannot manage to match sound and symbol in reading or spelling, and yet can comprehend what he reads, the

phonics should not be overemphasized.

Recommendations.--The student should be exposed to the same amount of phonics as the rest of his group, but not forced to learn it by being given extra. It should be allowed to sink in slowly. He can learn his spelling words by sight, not sound. His skills of getting meaning through context can be strengthened. After all, people learned to read before "phonics" was ever invented.

Case 4.--The nervous student who is troubled by noise or distraction.

Recommendations.--Although the remediation for this problem seems too obvious to mention, it is all too often overlooked. In designing the physical set-up of the place of instruction, it is important to provide quiet areas where the student may study away from a large group. It is a mistake to have nothing but an open-area arrangement. If it is already designed that way, individual study carrels along one wall can help somewhat. Moveable walls can be installed inexpensively, providing private areas. Some students can benefit by working with tape recorders and earphones which shut out extraneous noise. However, many nervous students find working with machines upsetting. If this is the case, they should not be forced to work with them. Many students, for example, dislike the inexorable clicking away of the controlled

reader, which times their reading speed. They can time themselves just as well with a stop-watch, a time/rate chart, and a printed copy of the selection to be read.

Case 5.--The student who wants to be in a group but who cannot really keep up with his peers (assuming that he is placed at the correct level).

Recommendations.--The teacher should call on him to perform those tasks or answer those questions where there is a reasonable chance for success. The teacher should always fit the question to the student, never just unthinkingly call on students in turn. The teacher must seek out the weak student's strengths. In every case, there is something he does better or knows more about than the other students. This skill or knowledge should be brought out frequently to bolster his ego. If there is any opportunity for that student to help someone at a lower level, that is one of the best reciprocal learning devices that can be used.

Case 6.--The student who will not push himself ahead through fear of failure if he tries something new (one of the commonest problems among adult literacy students).

Recommendations.--Broadening scope should be encouraged but not forced. A program that builds in small but steady increments of upward progression should be planned. The

student should keep records of his progress so he will be encouraged to move up rather than staying at the same point, doing the same thing over and over. He might work with another student (of his own choice) to stimulate healthy competition.

Case 7.--The student who wants to learn to write but is very reluctant to put anything on paper unless it is 100 percent correct (an almost universal problem among adult literacy students).

Recommendations.--It should be explained to him why his writing skill is so far behind his reading skill (why everyone's is); that is, that like every other skill, writing takes practise, and very few people have occasion to practise writing as much as reading. After he has absorbed that great truth, it can be suggested that he start practising. He (and his group) can spend a few minutes every day, as part of his school work, writing whatever he wants to. He can be assured that his writing can be completely private or that he can give it to the teacher for correction if he likes. If he dislikes putting down a misspelled word, he can ask another student or a teacher for the correct spelling, or perhaps he can look it up. There should be no holds barred as to what he writes or how he writes it. If he wants to be able to write, he must practise. And that is the long and the short of it.

# CHAPTER VII

# SUMMARY

## Restatement of the Problem and Procedures

The design for the development and implementation of the literacy program was based on a learning process known as the Dacum method. The designers of the program, consultants with Nova Scotia Newstart, assumed that a multi-media, multi-modal, self-directive approach would be superior to other methods and would limit the necessity for a teacher. Through the detailed analysis of commercial materials to fit the Dacum design, the use of those materials with students, and on-going research and adaptation, the research team arrived at a modified methodology and an array of data on the analysis of commercial reading systems. This researcher organized and synthesized the data collected between March 1971 and September 1972 into a suggested methodology for literacy instruction and devised a model for recording the analysis of commercial reading systems.

## Conclusions

Although the original assumption proved correct in recommending a multi-media, multi-modal individualized approach with adult literacy students, the research team discovered that there had to be a closer, more personal contact between teacher and student, with the teacher rather than

the student directing the learning process.

A fundamental difference in philosophy between the original assumption and the modified assumption was the nature of instruction and the role of the teacher. In the original assumption, the student was expected to have the insight, confidence and ability to recognize his reading needs and to choose the necessary resources to meet these needs. In practice, the researchers found that this expectation was unsupported. Not only did the illiterate adult not have any idea what his needs were, there was no guarantee that working through a given piece of material, possibly with no understanding of what he was doing, would satisfy his needs. Consequently, the teacher became the director of the learning process. He assessed the students' needs and conducted small-group, individual, and independent programs, thereby providing the students with the interpersonal contact, attention, and constant encouragement so needed by adults who have had a history of failure and therefore lack self-confidence. In other words, teachers structured a learning situation through which students could meet their individual needs.

## Recommendations for the Implementation of Future Programs

On the basis of the experience of the research team and the synthesis of that experience in this study, these recommendations are offered:

1. In an individualized program, a wide variety of materials is needed to accommodate learner preferences and to provide the necessary duplication needed with a minimum of boredom.

2. The kinds and amount of materials would of course depend on the financial capabilities of those using them. Telephone books, newspapers, magazines, menus -- indeed, any printed matter -- provide inexpensive sources of materials. Assuming that a limited amount of funds is available, the following commercial materials are suggested for their relative inexpensiveness, adaptability and flexibility of use for both group and independent study, applicability at all levels of literacy, and variety of content: Cracking the Code; Language Master Program; Lessons for Self-Instruction in Basic Skills (LSI); Mott Basic Language Program; Reading for Concepts; Reading Laboratory Series (SRA). Finances allowing, these sections of Learning 100 were found to be extremely useful for adult literacy training: Aud-X Program; "Go" Books; Study Skills Library; Controlled Reader Story Sets.

3. A program should have resource personnel or master teachers who have knowledge of the reading process, the diagnosis and remediation of reading problems, and various methods of assessment. Knowledge could be shared through in-service training and seminars with the teaching staff.

4. Instruction should be individualized and personalized, with provision for both group and independent study and instruction. The teacher should direct the learning process through diagnosis and prescription.

5. The physical environment should have sound-proofing and good illumination to help compensate for declines in hearing and vision with age. Open areas with moveable tables are useful for group activity. Closed areas, with some carrels, allow for small-group instruction and independent study.

6. Allotment periods for literacy training should be longer than a year. They should be as long as is necessary for an adult to become truly literate.

7. A program should have a counsellor to deal with the psychological and social problems of adults. If funds are not available for such specialized personnel, teachers should be selected for their ability to deal with such problems.

8. Evaluation systems should be set up to determine the effectiveness of a program and the factors responsible for student success or failure.

In conclusion, this study indicates that the literacy teacher cannot be replaced by a machine or a self-training process. Not even multi-media, multi-modal systems can entirely replace the teacher. In fact, for such systems to work

effectively, the teacher has to be directly involved in the problem-solving process by being in close contact with the students. An analysis of reading skills cannot function well as a student curriculum, nor can reading skills be learned in isolation; they must be learned in units along with other reading skills. The experienced teacher, better than any machine or pre-planned program, can judge what skills a student lacks and how he can best acquire them.

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# APPENDICES

# APPENDIX A

# READING TEST SCORES

# READING TEST SCORES

## Record of Students Graduated - as of May 1, 1972

| Student | Reading Level on Entry L-100* | Reading Level on Entry Spache Test** | Months on Course | Reading Level on Exit L-100* | Reading Level on Exit Spache Test** |
|---|---|---|---|---|---|
| 1 | RA | | 10 | | 6.5/6.5 |
| 2 | AA | | 6 | | 4.5/5.0 |
| 3 | BA | | 4 | | 4.5/5.0 |
| 4 | DA | | 3 | FA | |
| 5 | CA | | 4 | | 5.0/5.0 |
| 6 | CA | | 4 | | 6.5/6.5 |
| 7 | RA | | 5 | | 5.5/7.5 |
| 8 | FA | | 3½ | | 6.0/6.0 |
| 9 | BA | | 7 | | 5.0/5.0 |
| 10 | AA | | 3 | EA | |
| 11 | BA | | 3 | FA | |
| 12 | DA | | 4 | | 7.0/7.0 |
| 13 | FA | | 3 | | 7.5/7.5 |
| 14 | BA | | 3½ | | 5.5/6.0 |

| Student | Reading Level on Entry | | Months on Course | Reading Level on Exit | |
|---|---|---|---|---|---|
| | L-100* | Spache Test** | | L-100* | Spache Test** |
| 15 | BA-CA | | $3\frac{1}{2}$ | | 5.5/6.5 |
| 16 | CA | | 7 | | 7.5/8.5 |
| 17 | FA | | 3 | FA | |
| 18 | CA | | 6 | | 5.5/6.0 |
| 19 | AA | | $4\frac{1}{2}$ | | 6.0/6.5 |
| 20 | | 1.9/3.3 | 4 | | 5.5/6.5 |
| 21 | | 6.5/6.5 | 3 | | 7.5/7.5 |
| 22 | | 4.5/4.5 | $2\frac{1}{2}$ | | 6.5/6.5 |
| 23 | | 4.5/5.0 | $1\frac{1}{2}$ | | 6.5/6.5 |

The first students to enter the program were judged on the basis of their performance with Learning 100 (L-100) material. It was not until later in the program that the Spache Diagnostic Reading Scale was administered regularly on entry and exit.

* L-100 levels correspond to grade reading levels as follows:
  - RA - Reading readiness to Grade 1
  - AA - Grades 1 - 2
  - BA - Grades 2 - 3
  - CA - Grades 3 - 4
  - DA - Grades 4 - 5
  - EA - Grades 5 - 6
  - FA - Grades 6 - 7

** The first number of a Spache test refers to the instructional level, which is determined by oral reading. The second number refers to the independent level, which is determined by silent reading.

# APPENDIX B

## ANALYSIS OF COMMERCIAL READING SYSTEMS

ANALYSIS OF COMMERCIAL READING SYSTEMS

Allyn and Bacon Readers

Overview of the System

This series of readers is designed to provide pleasure reading for those (American) junior and senior high school students whose reading level is low (grades 2-6). The books in the series are these:

1. The Time Is Now--grades 6-7 age group
2. With It--grades 6-7 age group
3. Winner's Circle--adolescent
4. Beyond the Block--adolescent
5. This Cool World--adolescent
6. The Big Ones--adult

Analysis of the System

Format

Readers, pure and simple. Illustrations, but no questions, no "guides to reading". Soft-cover collections of true stories: short biographies, sports stories, science, outdoor adventures. Teacher's manual with lesson plans and skill activities included.

Focus

To provide high-interest materials for students from grade 6 to adult age who read at the 2-6 levels.

Strengths

1. Appealing as books to read purely for pleasure.
2. Really interesting stories, even though vocabulary simplified.

Weaknesses

1. First two books in the series inner-city oriented and therefore of limited interest to non-American-city students.
2. Other books in the series stress sports and American content; directed toward American junior and senior high school age group; of limited value for illiterate adults in Nova Scotia.

Suggested Uses

1. Independent, non-directed leisure reading.
2. Small group use, reading for pleasure and general broadening of background. Some stories provide a good basis for discussion.

Cautions

1. Readers not linguistically structured; reading skill activities much better handled in other types of books.
2. Lesson plans in teacher's manual not really adult-oriented.

## Basic Goals in Spelling

### Overview of the System

Basic Goals in Spelling is a series of workbooks, covering a grade level each from grades 1 through 8.

### Analysis of the System

Format

Workbooks whose lessons each contain a list of words selected for some similarity, and exercises using these words.

Focus

Spelling instruction by systematic phonetic and structural generalizations.

Strengths

1. Well organized and sequenced according to word analysis skills.
2. Contains a variety of exercises designed to teach discrimination.
3. Contains handwriting hints and dictionary activities.

Weaknesses

1. Instructions very difficult for students to read; exercises far easier than instructions.
2. Somewhat too child- and school-subject-oriented.

3. Exercises somewhat tedious.
4. No provision for self-correction, except for reference to teacher's edition.

Suggested Uses

1. Source of lists of high-frequency words which the student can learn to spell along with related lessons in word analysis.
2. Individual spelling improvement, where there is sufficient motivation.

Cautions

1. Not recommended for individual work except as mentioned above; too difficult to read directions.

2. Many lessons based on school subject vocabularies; not entirely relevant or necessary for adults.

## Cracking the Code

### Overview of the System

Cracking the Code is designed for remediation for students who read at the grades 4-6 levels but who still have problems with word-decoding. The series consists of two books only, both named Cracking the Code, one a workbook, the other a correlated reader.

### Analysis of the System

Format

Workbook: Word lists for each lesson, all built around some phonetic similarity, followed by the lessons--groups of amusingly illustrated exercises, repetitive enough to avoid confusion, yet varied enough to be interesting, even fun.

Reader: Very closely correlated with the workbook, whose exercises should be done first. Teacher's guide indicates what stories should be read after which lessons.

Focus

To remediate decoding problems of students reading at

the grades 4-6 levels; done by means of careful programming of materials according to sound-spelling patterns.

Strengths

1. Very well sequenced and correlated.

2. Patterns in workbook exercises easily followed. Adults seem to find great satisfaction in being able to read according to patterns.

3. Although child-oriented, materials appealing and amusing.

4. Teacher's guide well constructed; contains suggestions which work well.

Weakness

No provision for self-correction, except for reference to teacher's guide.

Suggested Uses

1. A quick remedial program for a group of students at the 4-6 level who do not decode accurately.

2. A remedial program for an individual student who reads at least at the fourth level and who is capable of following the workbook on his own.

3. A source of material for particular sound-spelling patterns to be introduced by the teacher at any level above the readiness level.

Cautions

1. Purposely designed to be fast-paced. Therefore, the teacher must be sure that the students are capable of reading at least at the fourth-grade level before moving them systematically through the program. Although the first lessons are easy enough for students at the first or second level, they very rapidly move way beyond that level.

2. Program intended to emphasize decoding skills. Therefore, it is essential that oral reading take place, that corrections be made, and that guesswork not be allowed.

## Ginn Word Enrichment Program

### Overview of the System

The Ginn Word Enrichment Program contains the following workbook-type volumes, covering a grade level each, from grades 1 through 7;

1. Look and Listen
2. Sounds and Symbols
3. Vowels and Variants
4. More Vowels and Variants
5. Sounds and Syllables
6. More Sounds and Syllables
7. Working with Words

### Analysis of the System

#### Format

Workbooks which call for fill-in or multiple-choice type answers.

#### Focus

Phonetic and structural analysis skills and vocabulary development; some dictionary work and concept development at the higher levels.

#### Strengths

1. Appealingly illustrated, well chosen material. Although child-oriented, it is not at all "babyish". Adults generally find it amusing.
2. Very well sequenced, with good reinforcement; built-in diagnostic and mastery tests.
3. Some unusual and interesting material not generally found in basic programs; for example, "Classification", "Analogies", "Origins and Changes in Language".
4. Patterns easy to follow once established by the teacher. Many students need very little instruction, even initially.

#### Weakness

No provision for self-correction, except for reference to teacher's edition.

#### Suggested Uses

1. Independent work for those students who can

actually read more than their word-attack skills would indicate; in other words, students who can read at, say, a level four, but who have not really mastered all the skills taught at level two. These students can progress fairly independently right through whatever book the teacher deems advisable.

2. Introduction of a new concept to a small group, who can then finish the appropriate pages at their own pace, with help from the teacher where needed.

Cautions

1. Immediate correction of exercises necessary. When this cannot be done by teacher, small groups can correct each other, using the teacher's edition. In this case, the teacher must check to see that errors are understood.

2. Program deliberately fast-paced, not primarily remedial. Therefore, many students may need more work on individual skills than is provided.

## Help Yourself to Read, Write and Spell

### Overview of the System

The two books in this program, both called Help Yourself to Read, Write and Spell, are designed for remediation for those students who have advanced past grade 4 without having mastered reading and writing, and for students for whom English is a second language. No grade levels are given, except for the suggestion of remediation past grade 4 for Book 1, with Book 2 beginning at a difficulty level approximately equal to that of the end of Book 1.

### Analysis of the System

#### Format

Workbooks, with perforated pages, in case they are to be torn out as completed, which teach words used in everyday life. The vocabulary is presented with pictures, followed by a series of exercises which use the words in their various forms (plural, present tense, etc.), and in sentences.

#### Focus

Book 1: Writing and spelling words in their various forms; completing simple sentences; parts of speech; punctuation;

vocabulary building.

Book 2: Same as Book 1, plus reading comprehension based on readings about everyday life, such as "Shopping in a Supermarket".

Strengths

1. Pictured vocabularies helpful for those students for whom English is a second language.
2. Good source of specialized, categorized vocabularies such as "The Classroom", "Money and Banking".

Weaknesses

1. Not sufficiently graded and, therefore, difficult for appropriate placement of students.
2. Many of the exercises designed for non-English-speaking students; series of limited use for native speakers.

Suggested Uses

1. Independent or small group work for those students for whom English is a second language.
2. Independent work for the student who really wants to work on his writing and spelling. (Most adult students can cope only with improving their reading.)
3. Source of specialized readings and vocabularies.

Cautions

1. Scope of these books limited; primarily writing books, not reading books.
2. Frequent consultation with student necessary, since there are no answers given.

## Language Master Program

### Overview of the System

The Language Master Program consists of six separate programs, of which only the following two are applicable to functional literacy:

1. Word Picture Program: Set 1--Nouns: Everyday Things
Set 2--Verbs: Action Words
Set 3--Basic Concepts

2. Phonics Program: Set 1--Sound Blending and Beginning Phonetic Skill
Set 2--Consonant Blends and Irregular Phonetic Elements
Set 3--Word Building and Word Analysis Technique

These programs are accompanied by a Language Master, which is an audio-visual machine consisting of a built-in amplifier, microphone, and loudspeaker.

## Analysis of the System

### 1. Word Picture Program

#### Format

Six hundred individually numbered cards, each with a thin strip of recording tape near the bottom, with two tracks. One track is an instructor track which cannot be inadvertently erased. The other is a student track which is automatically erased by recording over it. There are both pre-recorded and blank cards in each set. The pre-recorded cards are passed through a slot on the Language Master, so that the student hears a voice saying what is printed on the card. The student can then model this voice by passing the card through the slot, pushing the "student" button and speaking into the microphone. He can then play back and monitor his response. The blank cards are used to supplement the pre-recorded cards or to create teacher-made programs.

#### Focus

Sight vocabulary and simple sentences. Through association of word and picture, builds vocabulary on immediate recognition and provides repetitive auditory and visual practice.

#### Strengths

1. Auditory and visual practice at student's own rate.
2. Correct model on instructor track enables student to monitor his own recorded voice as often as he needs.
3. Excellent source of oral drill.
4. Excellent sight vocabulary builder.
5. Useful at all grade levels.

Suggested Uses

1. Sight-vocabulary building, especially useful for non-readers.
2. Remedial tool for visual, sequential memory.
3. Instruction in nouns, verbs and simple sentences.
4. Instruction in writing and spelling by having the student copy or write from memory the words or sentences on each card after he has read them.

Caution

Occasional monitoring necessary to ensure that the student is correctly modelling the instructor's voice.

2. Phonics Program

Format

Same as that of Word Picture Program.

Focus

Emphasize relationship between written and spoken language, by presenting a sound in isolation, then in words, phrases and, finally, sentences.

Strengths

1. Develops auditory discrimination.
2. Useful for students who are totally illiterate.
3. Develops good phonetic analysis skills in the context of phrases and sentences.

Weakness

Confusion sometimes caused because instructor's pronunciation of certain phonetic elements, particularly vowels and diphthong "ou", may differ from that of student.

Suggested Uses

1. Development of an individual's phonetic skills.
2. Remediation of various, separate skills (i.e., long vowels, consonants).
3. Instruction for beginning readers in the alphabet sounds and symbols.

Cautions

1. Too much phonetic analysis in isolation not very useful. Students should have approximately a hundred words

in their sight vocabulary before really starting phonetic analysis in earnest.

2. Occasional monitoring necessary to ensure that the student is correctly modelling the instructor's voice.

## Learning 100

### Overview of the System

Because the L-100 program is intended to be a "total system of education", it has the inherent disadvantages as well as the advantages of such a concept. While its carefully structured sequencing and integrating of the various parts of the system are very helpful in situations where there are too few teachers or where the teachers are either inexperienced or uncreative, that same elaborate structuring can be unchallenging for the teacher and therefore stultifying for the student. Of course, a teacher can greatly enrich such a program; but because it appears to be adequate, the teacher tends to just let it operate as is. It is not really sufficient as a whole system, because it does need a great deal of enrichment. There is simply not enough material, various as it is, for the student to advance completely from level to level. In other words, without enrichment, the student will have read all the Learning 100 materials in Level 3, for example, and still not be ready to move on to Level 4.

In an attempt to create a reading program that will be attractive to functionally illiterate adults, Educational Developmental Laboratories (EDL) has placed heavy stress on the use of audio-visual techniques, utilizing approaches that will hopefully be recognized by the mature adult as new and different. Again, the advantages of such a program are at least balanced by its disadvantages: newness and difference wear off; audio-visual equipment is costly; machines break down. And EDL equipment is <u>very</u> costly (one Aud-X machine with filmstrips and cassettes covering levels from illiteracy to approximately Grade 6 cost almost $2,000 in 1972), and, unfortunately, not of consistently high technical quality.

Though the content of L-100 is adult- rather than child-oriented, it is somewhat patronizing. Emphasis is placed on what the student as a disadvantaged adult "needs to know"--such things as the most elementary aspects of used-car buying, or of housepainting, for example--rather than on what he might like to know. Therefore, many of the discussion periods built in according to the teacher's manual are, in the first place, unnecessary, and in the second place, likely to be boring and even insulting.

Anyone wishing to use the L-100 program must familiarize himself with the enormously elaborate and difficult-to-follow Instructor's Manual and Cycle Lesson Plans.

The L-100 system includes these sub-systems, which will be discussed in detail below:

1. Aud-X--Levels identified as RA, AA,BA, CA, DEFA (in ascending order of difficulty from reading readiness to approximately Grade 6)
2. Tach-X--Levels RA, AA, BA, CA, DA, EA, FA
3. Flash-X--Levels RA, AA, BA, CA, DA, EA, FA
4. Controlled Reader--Levels RA, AA, BA, CA, DA, EA, FA
5. "Go" Books--Levels RA-AA, BA, CA, DA, EA, FA
6. Listening Tapes--Levels DA, EA, FA
7. Study Skills Library--Levels D, E, F

Analysis of the System

1. Aud-X

Format

Audio-visual filmstrips coordinated with cassette tapes and related workbooks. Each lesson consists of two parts: (1) a story which the student listens to as key words are flashed on the screen; and (2) a word study, which uses a given set of words, having a particular phonetic or structural similarity, in various contexts.

Focus

Story: Primarily, development of sight vocabulary; secondarily, development of listening skills.

Word Study: Phonetic and structural analysis.

Strengths

1. May be used entirely independently of a teacher, either by individual or small group.
2. Well structured, sequenced, and reinforced.
3. Immediate feedback and self-correction; most answers are given on the tape.

Weaknesses

1. No provision for stopping or rewinding filmstrips; if any confusion or interruption, no alternative but to go

back to the very beginning.

2. Easy to push the wrong button, putting filmstrips and cassettes out of phase.

3. No way to speed up, slow down, or skip any of the tape; all students must proceed at the same pace, exasperatingly slow for most.

Suggested Uses

1. Independent work for students at the lower levels who can read very little by themselves.

2. Enhancement of visual perception by concurrent auditory perception.

Cautions

1. Some workbook questions not answered on tape. Teacher should encourage student to seek correction when needed.

2. Aud-X material slow-paced. Most students get bored with it before they complete it. While it is very useful at the RA and AA levels, its use is limited at the higher levels.

2. Tach-X

Format

Tachistoscope projector with filmstrips and related workbooks. Symbols or words are flashed on a screen in brief exposures, the timing of which can be adjusted.

Focus

Basic Accuracy Filmstrips: Development of visual perception, discrimination, and memory.

Word Recognition Filmstrips: Development of rapid recognition of words: sight vocabulary. At the DA, EA, FA levels the workbooks provide dictionary and spelling practice.

Strengths

1. Controls speed of recognition so that progress can be noted.

2. Words used correlate with words introduced in other EDL media at the same level.

3. Forces student to concentrate.

Weaknesses

1. Difficult for operator of machine to keep in phase. But this can be mastered with practice.
2. Very hard on the eyes. Many students report that they do not like it for this reason.

Suggested Uses

Basic Accuracy: Warm-up for whole group.

Word Recognition: Reinforcement for those students who are working on other EDL material.

Cautions

1. Basic Accuracy designed for short exposure, never more than five or ten minutes at a time.
2. Beyond beginning levels (RA-AA), Word Recognition filmstrips of limited use. If the L-100 is not used as a total system, the memorization of out-of-context words is of little value.

3. Flash-X

Format

Small hand instrument which uses the same Word Recognition material as the Tach-X.

Focus

Development of rapid recognition of words: sight vocabulary.

Strengths

1. Much less expensive than Tach-X.
2. Can be used by individual students; does not require a teacher.
3. Individual discs can be made of any vocabulary.

Weaknesses

1. Only one speed; too fast for some, too slow for others.
2. Instructions in workbooks not clear as to which list of words goes with which exercises.

Suggested Uses

1. Vocabulary reinforcement for those students who are working on other EDL material. Levels must be coordinated.
2. Extra practice beyond that given by Tach-X in a group situation.
3. Sight vocabulary building, using teacher- or student-made discs.
4. Spelling aid: flash the word, say it, write it.

Caution

Beyond the beginning levels (RA-AA), Flash-X discs of limited use. If the L-100 system is not used as a total system, the memorization of out-of-context words is of little value.

4. Controlled Reader

Format

Large projector for group use, or smaller projector for individual use, with filmstrips and related workbooks. Whereas the Tach-X shows single fixations, the Controlled Reader shows multiple fixations, as is normal in reading. The speed can be adjusted, as can the length of the exposed fixations.

Focus

Motility Training Filmstrips (MT): Development of ability to fixate and coordinate visually at high rates of speed.

Accelerated Discrimination Filmstrips (AD): Development of perceptual accuracy.

Processing Training Filmstrips (PT): Development of rapid word recognition--sight vocabulary--through words previously introduced and now flashed rapidly on the screen in story context.

Fluency Training Filmstrips (Story Sets): Development of speed in reading. Whereas the Processing Training filmstrips concentrate on sight vocabulary by flashing the story one word at a time, the Story Sets aim at overall reading fluency by projecting the story in whole lines at a time, with a moving slot which forces left-to-right eye movement.

Comprehension Power Filmstrips (CP): Used only at the higher levels: DA, EA, FA. Same as Fluency Training but at faster speeds, with emphasis on overall rather than detailed comprehension.

Strengths

1. Effective for concentration enforcement and, in most cases, speed development.
2. Speed-control dial; student can chart progress. Most students do progress (if only because they start so slowly and cautiously), and this is very reinforcing.

Weaknesses

1. With exception of Fluency Training Story Sets, all filmstrips require teacher; no workbooks in which student can record and check answers. A teacher is not always available in an individualized instruction set-up.
2. Inexorable clicking away of the machines hard on student's nerves.
3. Unnatural eye movements. Because only one line of five words appears at a time, the eyes do not drop down to the next line as they would in reading any normal page of print. Students have complained that this procedure quickly tires the eyes.
4. Too much concentration on speed in Story Sets and Comprehension Power Filmstrips. The teacher must be alert to the possibility of comprehension being sacrificed for the sake of speed.
5. Stories, while adult, not exactly fascinating; heavy in American content.

Suggested Uses

1. Motility Training and Accelerated Discrimination: Whole-group warm-up.
2. Processing Training: Speed and concentration development for those who are not ready for Story Sets. A student can use these without a teacher's help, but there is no way for him to check his concentration.
3. Story Sets: Individual work, with students charting own progress.
4. Comprehension Power: Where student's fluency is sufficient; should be used with teacher.

Cautions

1. Motility Training and Accelerated Discrimination designed for short exposure, never more than five or ten

minutes at a time.

2. Machine reading distasteful to some students. Suggest that student try machine; if he can't stand it, he should not be forced. The stories in the Story Set workbook can be timed just as well with a stop-watch and a time/rate chart. Many students find this less nerve-wracking and less threatening.

## 5. "Go" Books

Format

Workbooks consisting of reading selections followed by a variety of exercises. No answers provided in workbooks.

Focus

Reading comprehension skills; reinforcement of word analysis skills learned elsewhere; basic writing skills.

Strengths

1. Sufficient variety to provide interest for most students, at least for a while.
2. Well-coordinated reinforcement.

Weaknesses

1. Many stories American-ghetto-oriented; not appropriate for all groups of students.
2. No means of self-correction, and no answer keys; teacher must check.
3. Reading level of directions to student often higher than reading level of workbook itself. Therefore, although the student may be able to do an exercise, he may be unable to read what it is he is supposed to do.

Suggested Uses

1. Independent work in a guided workshop.
2. Independent work at all levels.

Cautions

1. Correction after each lesson or two necessary. Students very easily get off the track, and will proceed incorrectly without even knowing it.

2. For most students, the writing called for much more difficult than the reading. The teacher must be aware

of the constant need for instruction.

### 6. Listening Tapes

Format

Cassette tapes with accompanying workbooks.

Focus

Listen: Listening comprehension skills.

Listen and Read: Listening and reading comprehension skills.

Listen and Write: Listening comprehension and writing skills.

Strengths

1. Appealing as a variant way to learn.
2. Many tapes interestingly presented.
3. May be used with earphones which shut out distraction.
4. Answers given on tape: immediate feedback.

Weaknesses

1. Cassettes not very good quality mechanically; frequently stick or become snarled.
2. Many concepts in Listen and Read and Listen and Write difficult for students to understand without teacher's help. For example, a lesson on making inferences has often proved to be puzzling to students working alone, whereas the same lesson becomes clear with a little teacher explanation.

Suggested Uses

1. Listen: Independent work for students with comprehension problems which may be the result of lack of ability to concentrate.
2. Listen: Independent work for students for whom English is a second language.
3. Listen and Read and Listen and Write: In small group situation with teacher to help explain new concepts.

Cautions

1. Not all tapes of general interest or usefulness to disadvantaged adult seeking vocational training. The

poetry tapes are an example.

2. Listen and Read and Listen and Write difficult for most students. Adequate preparation is necessary before independent work.

7. Study Skills Library

Format

Nine kits containing ten lessons each. Each lesson involves: (1) preparation for a reading in a subject area; (2) the reading itself; (3) a set of ten comprehension questions; and (4) a set of exercises on a particular study skill.

Focus

D, E, F--Science

DD, EE, FF--Social Studies

DDD, EEE, FFF--Reference Skills

Strengths

1. Very good informative material.
2. Good, simple presentation of the various study skills.
3. Answer keys provided: immediate feedback.
4. Can be used effectively without a teacher.

Suggested Uses

1. Independent work to prepare students for study in subject areas.

2. Introduction of particular information or study skills to a small group. The lesson can be started with the teacher, finished by the students at their own pace and later expanded by the teacher.

## Lessons for Self-Instruction in Basic Skills

### Overview of the System

The Lessons for Self-Instruction (LSI) reading kit contains booklets of programmed instruction under three different topics and at four increasingly difficult levels, from grades 3 through 9. These are:

1. Following Directions--levels A-B, C-D, E-F, and G
2. Reference Skills--levels A-B, C-D, E-F, and G
3. Reading Interpretations I--levels A-B, C-D, E-F, and G
4. Reading Interpretations II--levels A-B, C-D, E-F, and G

(There are also kits available on Mathematics and English Arts.)

### Analysis of the System

#### Format

Programmed instruction; questions in multiple-choice form with probable errors not only included as choices but explained when student discovers that he has made the error. Answers recorded on a separate record sheet.

#### Focus

Following Directions: Following directions which require exactness in reading and interpretation.

Reference Skills: Use of simple reference aids to finding specific information.

Reading Interpretations: Development of such skills as recognition of facts; cause and effect, sequence of events, main idea, fact or fiction; paraphrasing; inference; visualizing detail; using context to determine meaning.

#### Strengths

1. Extremely well designed. Covers a wide range of interesting and useful skills.
2. Very easy to understand and to follow. Almost entirely self-instructional.
3. Different and fun to do. Adults seem to enjoy these workbooks thoroughly and to feel as though they have accomplished something tangible. Although not difficult, the exercises are like solving puzzles.

Suggested Uses

1. Preparatory work for individual students who will soon work independently in subject areas.
2. Independent work for students who need to enrich or strengthen reading comprehension skills.

Cautions

1. Lowest level (A-B) extremely simple; might be quickly skipped over once the student catches on. Student should be started at A-B level, however.
2. Designed as a specialized supplementary aid only, not to be used as a steady diet.
3. Booklets useless without record/answer sheets; very easy to exhaust supply without realizing.

## The Mott Basic Language Skills Program

### Overview of the System

The Mott Basic Language Skills Program contains the following:

1. Word Bank--Grades 0 through 2. Three hundred photographs associated with the names of common objects.
2. Original Series--Books 300A and 300B, 600A and 600B, 900A and 900B, numbered in ascending order of difficulty from grades 0 through 9. Workbooks containing drill on word attack skills, composition, grammar, vocabulary and comprehension.
3. Semi-Programmed Series--Books 1300-1306 and Books 1607-1610, numbered in ascending order of difficulty from grades 0 through 6. Workbooks teaching the same skills as the Original Series, but more slowly, in greater detail. Much of the workbook is programmed; that is, the answers are provided in a column on the left-hand side of each page, thus affording continuous feedback on each small increment of instruction.
4. Word Attack Skills 160--Grades 0 through 4. The introductory book to the Comprehension Series, containing a review of the contents of the Original and Semi-Programmed Series.
5. Comprehension Series--Books 301-304 and 601-604, numbered in ascending order of difficulty from grades 2 through 6. Readers in programmed workbook form.

## Analysis of the System

### 1. Word Bank

Format

Three hundred photographs associated with printed and written form of names of common objects.

Focus

Sight vocabulary of common nouns. Through association of picture with word, it aims at building vocabulary on immediate recognition--on sight--rather than on phonetic analysis.

Strengths

1. Needs no instruction.
2. Photo vocabulary used in story contexts to reinforce word recognition.

Suggested Uses

1. Supplemental reader for individual use.
2. Visual aid for students who have particular difficulty with visual sequential memory perception.

Caution

Limited carry-over as tool for developing sight vocabulary. What may be a common object in one's speaking vocabulary may not necessarily be commonly found in reading. For example, the word "ladder" is undoubtedly within the speaking vocabulary of most adults; however, it is not commonly found in reading.

### 2. Original Series

Format

Workbooks without self-correction.

Focus

Book 300A: Phonetic analysis skills.

Book 300B: Phonetic analysis skills.

Books 600A and 600B: Structural analysis skills, vocabulary, comprehension, basic composition skills, and use of references.

Books 900A and 900B: English grammar and usage, vocabulary building, composition skills, and comprehension.

Strengths

1. Well-developed sequential order.
2. Simple directions.
3. Adequate variety of examples and exercises.

Weaknesses

1. Too American-oriented for Canadian students, particularly Books 600A and 600B.

2. Too academic; usefulness of much of the grammar and usage of 900A and 900B to the average disadvantaged adult seeking upgrading is questionable.

Suggested Uses

1. Teacher's use in preparing materials for instruction in a particular skill.

2. Group instruction, focusing on a particular skill.

Cautions

1. Designed to be fast-paced; limited amount of material covering one concept. Many students would fare better with the Semi-Programmed Series.

2. Large gaps between 300 and 600 series and 600 and 900 series; type of material presented in each series is very different. Even though a student may have successfully completed one series, he may not really be ready for the next.

3. Semi-Programmed Series

Format

Partially programmed workbooks, with answers to many of the exercises in a column on the left-hand side of the page.

Focus

Book 1300: Reading readiness and formation of letters.

Books 1301-1306 (correlated with Books 300A and 300B): Phonetic analysis skills.

Books 1607-1610 (correlated with Books 600A and 600B; replacing old numbers 1307 -1310): Structural analysis skills, vocabulary building, comprehension, basic composition skills, and use of references.

Strengths

1. Well-developed sequential order, with a reasonable amount of repetition, thus causing reinforcement of skill.
2. Simple directions.
3. Words to be learned always to be written out in full, never selected as in a multiple-choice situation. Thus there is greater reinforcement through writing as well as reading.
4. Self-correction: immediate feedback.
5. Most of the work easily done without a teacher's help after initial instruction of each new concept.

Weaknesses

1. Answers too readily visible; difficult not to inadvertently obtain answer prior to writing it.
2. Prominent category of the higher-level books (1607-1610), the "American Scene", largely inappropriate for Canadian students.

Suggested Uses

1. Corrective or remedial work for individual student.
2. Group instruction, focusing on a particular skill, with members of the group then completing the work at own individual pace.
3. Source of material for cassette tapes of the books focusing on phonetic skills (1301-1305 especially).

Cautions

1. Cassettes easily overused. The teacher should be aware, first, of the soporific effect of tapes, and second, of the tendency to forget about a student who seems to be securely embedded in a set of earphones--he may be either asleep, hypnotized, confused, or merely "getting away from it all".
2. Introduction of each new concept and follow-up by teacher necessary. The lessons are structured so that a student can easily follow a pattern, thus getting correct answers, perhaps without having the remotest idea that it _is_ a language pattern. In other words, without teacher guidance, there may be little carry-over, little actual learning.

## 4. Word Attack Skills 160

Format

A single workbook containing an overview of the contents of Books 300A and 300B, 600A, 1301-1306, and 1607-1608.

Focus

Phonetic and structural analysis skills.

Strengths

1. Guide to location of all basic skills covered in Books 300A and 300B, 600A, 1301-1306, and 1607-1608 contained in Table of Contents.
2. Fast, comprehensive review of all the basic word attack skills.

Suggested Uses

1. Teacher's guide to skills and materials.
2. Fast review for individual student or group.
3. Diagnostic tool to locate an individual's weaknesses and properly place him in the appropriate skill book for remediation.

Caution

Not designed for initial instruction in a skill, but only for diagnosis or review.

## 5. Comprehension Series

Format

Programmed workbook-readers with answers in a column on each page.

Focus

Comprehension, by means of structured reading which helps the student to understand what he is reading in small increments. The student responds to factual questions by giving multiple-choice answers at the end of each short passage. These passages become increasingly longer throughout the series.

Strengths

1. Relatively high-interest, adult-content material.

2. Well-structured material for student whose principal difficulty is lack of comprehension (which may result from lack of ability to concentrate, lack of ability to remember, lack of ability to draw conclusions or inferences, or simply lack of facility with the English language). Questions build up from factual detail after single sentences to those which ask for main idea and/or inference after several paragraphs.

3. Self-correction: immediate feedback.

4. Very little instruction necessary.

Weaknesses

1. Answers too readily visible: difficult not to inadvertently obtain answer prior to writing it.

2. Content too American-oriented.

3. Limited range; highest levels too easy for many students who need to continue reading increasingly difficult passages while improving their word analysis skills.

Suggested Uses

1. Independent work for students who need to improve comprehension.

2. Independent work for students for whom English is a second language.

Cautions

1. Primarily designed for comprehension problems.

2. Series extremely simple. Books may rapidly become too easy as the student catches on. Some of the books in the series should probably be skipped, unless the student particularly enjoys them.

## The New Streamlined English Series

### Overview of the System

The New Streamlined English Series consists of two parts:

Part 1. Five Skill Books--Grades 0 through 5. A basic reading and writing course for adults. Each book has a correlated reader which reinforces the work done in the Skill Books and encourages independent reading based on adult interest and experience.

Part 2. Everyday Reading and Writing--Grades 6 and 7. Designed for students who have mastered the mechanics of reading.

Analysis of the System

1. Five Skill Books

Format

Text-workbooks which use pictures with superimposed letters to associate sound with sight. Key words illustrating each sound are presented in chart form. The chart is followed by a story using the words in context.

Focus

Basic reading skills, including phonics, structural analysis, comprehension, and vocabulary development.

Strengths

1. Covers all skills of literacy: phonics, structural analysis, reading comprehension, vocabulary, writing, and spelling.
2. Designed specifically for adults.
3. Correlated readers allow student to practice mechanics learned in Skill Books.

Weaknesses

1. Stories in Skill Books somewhat dull for adults.
2. No provision for self-correction without reference to teacher's manual.

Suggested Uses

1. Introduction of a new skill to a small group, who can then finish appropriate pages at their own pace.
2. Remedial work for those students who have large sight vocabulary but cannot decode new words.

2. Everyday Reading and Writing

Format

Contains fourteen units, each structured around a major subject area. Each lesson provides both information and reinforcement in review exercises and homework.

Focus

Skills needed for reading newspapers, maps, signs, instructions, important papers; writing skills.

Strength

Interesting and useful material for adults.

Suggested Uses

1. Independent work for students who have mastered the mechanics of reading.
2. Group work in specific subject areas.

Programmed Reading for Adults

Overview of the System

This series contains eight programmed texts accompanied by placement and achievement tests, a sound-symbol booklet, alphabet and word cards. No grade levels are specified by the author. Those indicated are based on the experience of the research team.

1. The Letters of the Alphabet--levels 0-1
2. The Sounds of the Letters--levels 0-2
3. From Words to Sentences--levels 0-2
4. Sentence Reading--levels 2-4
5. Paragraph Reading--levels 4-6
6. Consecutive Paragraphs--levels 4-6
7. Content Analysis--levels 4-6
8. Functional Reading--levels 4-6

Analysis of the System

Format

Programmed instruction. Books 1 and 2 are teacher-directed. In Books 3-8, the teacher continues to work through the first four pages with the students. After that, each student works independently at his own speed. Every unit of twenty-four pages concludes with a test. If the student passes these tests, he goes on to the next unit in the book. If he does not, he repeats the unit. When a

student completes a book, he takes an exam. If he passes it, he goes on to the next book. If he fails it, he repeats the book.

Focus

Phonetic and structural analysis; vocabulary development; comprehension of simple and complex sentences and paragraphs; sequencing and comprehension of consecutive paragraphs; analysis, comprehension, interpretation, recall, and drawing conclusions from stories.

Strengths

1. Well sequenced.
2. Immediate feedback.
3. Excellent teacher's manual containing general descriptions of the content of each book, a page-by-page vocabulary list and sound-symbol progression, instructions for student placement, and supplementary exercises to accompany each unit of study.

Weaknesses

1. Answers too readily visible; difficult not to inadvertently obtain answer prior to writing it.
2. Repetitious; if a student fails a test or exam, he has to repeat the same material. This would seem to defeat the purpose of the format--immediate feedback and success--and might give the student a sense of failure.
3. Stories dull, childish, and meaningless to adults.

Suggested Uses

1. Books 1 and 2: Group work with adults who need a great deal of teacher assistance.
2. Books 3-8: Independent work for students who prefer to or are able to work on their own.
3. Development of phonetic skills at all levels.

Cautions

Books 1-4: Phonetic skills presented in isolated words and sentences. It could be argued that presenting regular phonetic elements in word and sentence patterns facilitates internalization of these skills. Indeed, the repetitive nature of such a technique is beneficial to adults who have a retention problem. However, the purpose of such a format should be pointed out to adults in order that they not be

frustrated by the apparent meaninglessness of some of the material. They must be convinced that mechanics, as dull as they are, are essential to learning to read.

## Reader's Digest

### Overview of the System

The Reader's Digest Educational Division puts out an enormous number of educational tools including various sets of skill-building readers, audio lessons, anthologies--even atlases and globes. Probably very few schools would ever use all of their offerings. The following will be analyzed in detail below:

1. Reading Skill Builders (Original Series)--levels 1-8
2. New Reading Skill Builders--levels 1-6
3. Reading Skill Practice Pads--levels 1-6; may be used independently or in conjunction with Reading Skill Builders
4. Audio Lessons--levels 1-6; readings from New Reading Skill Builders
5. Readings--designed for adults learning English as a second language
6. Adult Interest Readers--levels 1-4
7. Science Readers--levels 3-6

A master manual containing instructions for using these various series is available.

### Analysis of the System

1. Reading Skill Builders (Original Series)

#### Format

Soft-cover, digest-size, color-illustrated readers. Most selections are followed by a variety of exercises.

#### Focus

Comprehension and interpretation; word study; study skills; critical and creative reading. These skills are reintroduced with increasing complexity throughout the series.

Strength

Content varied and interesting.

Weaknesses

1. Somewhat dated. This Original Series came out in 1958-60 and has not been reedited.
2. Selections at levels 1 through 3 too childish: main characters are children. The exercises, too, focus on thinking skills needed to be developed by children, but not by adults. The selections at levels 4 through 8 are not too childish, although some of the exercises are.
3. Material at levels 5 through 8 somewhat oriented toward American biography and history; not appropriate for Canadian students.

Suggested Uses

1. Independent readers, particularly for those students who can read at the fourth level and beyond.
2. Source of readings appropriate for small-group situation, followed by discussion or skill work.
3. Source of types of exercises teacher may adapt.

Cautions

1. Books most valuable just as readers. Student should not be forced to do exercises unless he wishes to do them.
2. Books most valuable as leisure reading. Student should be encouraged to be selective. He should be guided to a suitable level, which may be either higher or lower than his instructional level, depending on whether he prefers challenge or security.

2. New Reading Skill Builders

Format

Soft-cover, digest-size, color-illustrated readers. Most selections are followed by a variety of exercises.

Focus

Comprehension and interpretation; word-study; study skills; critical and creative reading. These skills are reintroduced with increasing complexity throughout the series.

Strengths

1. Content varied and interesting.
2. 1969 edition: much more current articles than in Original Series, more science, more factual material, much less childish content.
3. Canadian edition: content much more international than in Original Series. The American focus has been dropped, but it has not been replaced by a Canadian focus.

Weakness

Level 1 and $1^{+}$ books too childish for adults. While many of the exercises are good, there are childish ones throughout the series.

Suggested Uses

1. Independent readers, particularly for those students who can read at the second level and beyond.
2. Source of readings appropriate for small-group situation, followed by discussion or skill work.
3. Source of types of exercises which teacher may adapt.

Cautions

1. Books most valuable just as readers. Student should not be forced to do exercises unless he wishes to do them.
2. Books most valuable as leisure reading. Student should be encouraged to be selective. He should be guided to a suitable level, which may be either higher or lower than his instructional level, depending on whether he prefers challenge or security.

3. Reading Skill Practice Pads

Format

Workbooks, with separate teacher's edition answer keys. Intended to supplement Reading Skill Builders.

Focus

Phonetic and structural analysis; vocabulary skills; comprehension; interpretation; study skills; some critical reading.

Strengths

1. Well sequenced; key skills reintroduced with increasing complexity.
2. Good variety of exercises and skills presented.
3. Workbooks edited for Canadian schools: content not overwhelmingly American, nor too aggressively Canadian.
4. Annotations in teacher's editions helpful.

Weakness

First three workbooks (1-3) child-oriented; advanced workbooks, however, are not.

Suggested Uses

1. Source of supplementary materials from which teacher may select in planning lessons.
2. Workbooks for individuals in need of a particular skill practice, which the teacher selects.

Caution

Workbooks are designed for children going through school at a leisurely pace. Material should be selected.

4. Audio Lessons

Format

Cassette tapes of stories selected from New Reading Skill Builder series. Two stories from each book: a total of four stories for each level from 1 through 6.

Focus

Aural comprehension; reinforcement of reading skills of comprehension and interpretation; improvement of oral reading. Each lesson emphasizes a particular reading or listening skill.

Strengths

1. Good sound reproduction and reading.
2. Clear instructions: a minimum of teacher time required.
3. Answers to questions given along with explanations of why they are the best choice.

Weaknesses

1. Selections from levels 1 and 2 childish; readings interrupted with child-oriented "thought" questions.
2. Although selections from 3 through 6 not particularly childish, many of the skill questions not appropriate for adults as they involve concepts which most adults have mastered regardless of whether or not they are literate.

Suggested Uses

1. Independent oral reading practice.
2. Vocabulary development by means of enabling a student to decipher a story somewhat above his instructional level.
3. Independent work for those students for whom English is a second language.
4. Aid for those students who have trouble concentrating.

Caution

Child-oriented skill questions; students should be advised to ignore them.

## 5. Readings

Format

Soft-cover, digest-size, color-illustrated readers. Most selections are followed by a variety of exercises.

Focus

English as a second language. Emphasizes vocabulary development and comprehension.

Strengths

1. Content adult and interesting.
2. Questions and exercises varied and interesting.

Weakness

No teacher's editions or answer keys.

Suggested Uses

1. Independent readers, particularly for those students who can read at the third level and beyond.

2. Source of readings appropriate for small-group situation, followed by discussion or skill work.
3. Source of types of exercises teacher may adapt.

Cautions

1. Books most valuable just as readers. These readings and exercises are designed for people for whom English is a second language, and therefore many of the vocabulary exercises are unnecessary for native speakers of English.
2. Books most valuable as leisure reading. Student should be encouraged to be selective. He should be guided to a suitable level, which may be either higher or lower than his instructional level, depending on whether he prefers challenge or security.

6. Adult-Interest Readers

Format

Small (thirty-two pages each) soft-cover, digest-size, color-illustrated readers, with a variety of exercises with answers at the back of the book.

Focus

Comprehension; vocabulary building; word attack skills.

Strengths

1. Content adult and interesting.
2. Questions and exercises varied and interesting.
3. Answers included in each book.

Suggested Uses

1. Independent readers, particularly for those students who can read at the second level and beyond.
2. Source of readings appropriate for small-group situation, followed by discussion or skill work.
3. Source of types of exercises teacher may adapt.

Cautions

1. Books most valuable just as readers. Student should not be forced to do exercises unless he wishes to.
2. Books most valuable as leisure reading. Student should be encouraged to be selective. He should be guided to a suitable level, which may be higher or lower than his instructional level, depending on whether he prefers challenge or security.

## 7. Science Readers

### Format

Soft-cover, digest-size readers, illustrated with diagrams, drawings, and photographs.

### Focus

Concepts of science. Each book is organized around four major areas: the earth, living things, matter and energy, and astronomy and space.

### Strengths

1. High-interest material, valuable for teaching scientific concepts.
2. Further readings on same subject suggested after many articles.

### Weakness

Many suggested activities child-oriented.

### Suggested Uses

1. Independent readers for those students who are interested in science and who can read at the third level or beyond.
2. Source of readings appropriate for small group situation, followed by discussion or skill work.

### Caution

Readers not designed to be used for purposes of reading instruction per se.

## Reading for Concepts

### Overview of the System

The basic premise of the design of the *Reading for Concepts* series is that reading should not be taught in fragmented pieces, and that information derived from reading should relate to large ideas. Almost all of the readings are factual, organized into groups of concepts

ranging from simple to complex, from concrete to abstract, from immediate to expanded. The material is drawn from the academic disciplines of anthropology, art, biology, earth science, ecology, economics, engineering, geography, history, mathematics, political science, sociology, and space. Although the series is designed for children, it is not at all childish and has proven to be very valuable for disadvantaged adults, most of whom lack general knowledge. The eight books in the series, lettered from A to H, encompass grade levels 1.9 to 6.4.

## Analysis of the System

### Format

Soft-cover, illustrated readers, each containing seventy-two to eighty articles arranged around two, three, or four major concepts. Each article is contained on one page, with a facing page of from seven to nine questions.

### Focus

Development of conceptual thinking; comprehension skills; accuracy and discrimination.

### Strengths

1. Extremely well organized, high-interest material.
2. Consistent, recurring pattern of questions after each selection, making continual direction by a teacher unnecessary.
3. Well designed and searching questions requiring thought rather than rote answers.

### Suggested Uses

1. Independent readers for those students who can read at the second level and beyond.
2. Small-group work. The material lends itself to interesting discussion. The questions are thought-provoking and often lead to lively and valuable debate.

### Cautions

1. Some teacher guidance necessary even if used as independent readers. The student may need help in understanding his mistakes.
2. Many questions difficult. If used for group work, the easier questions should be selected for the poorer students, leaving the questions requiring some complexity of thought for the more able students.

## Reading Laboratories Series (SRA)

### Overview of the System

The Science Research Associates (SRA) Laboratories constitute a twelve-year developmental reading instruction program extending from grade levels 1 through 14. Each SRA Laboratory contains a finely divided continuum of readings and word-study skills, exercises appropriate for students of a wide range of abilities. The kits with their grade-level ranges are as follows:

1. SRA I (Word Games)--levels 1-3
2. Ia--levels 1-3
3. Ib--levels 1-4
4. Ic--levels 1-5
5. IIa--levels 2-7
6. IIb--levels 3-8
7. IIc--levels 4-9
8. IIIa--levels 3-12
9. IIIb--levels 5-12

(There is also a college preparatory edition available, SRA IVa, grade levels 8-14.)

### Analysis of the System

#### 1. SRA I (Word Games)

##### Format

Kit of forty-four games using illustrated cards to teach word-attack skills. The kit also contains a Phonics Survey for diagnosis and a set of Check Tests accompanying each of the games.

##### Focus

Phonetic and structural analysis skills.

##### Strengths

1. Well structured and sequenced.
2. Useful for variety.

##### Weaknesses

1. Too child-oriented. Although adults like games, they are not usually fascinated by this one.
2. Cumbersome. Each of the forty-four sets of

cards is contained in a separate little envelope which is filed in a big box. The cards can all too easily get lost, placed in the wrong envelope, or filed incorrectly.

Suggested Uses

1. Variety for those students at the lower levels who are having difficulty mastering word-attack skills.
2. Phonics Survey and Check Tests: progress checks for students at all levels.

Cautions

1. Mastery of skill to be checked necessary before using Check Test. The tests are so simple that they give opportunity for great reinforcement, provided the student has learned the skill.
2. Games easily misused. If individual students or groups of students use the games without a teacher, they should be guided at first.
3. Games easily misplaced. Students should be taught to return the games to their proper envelopes.

2. SRA Ia, Ib, Ic

Format

Kits (one for each: Ia, Ib, Ic) consisting of a multilevel series of readings and exercises (Reading Power Builders), each on a separate card; separate answer cards; student answer sheets; student record books. This series also includes a Listening Skill Builder program which is designed to be administered by a teacher.

Focus

Reading Power Builders: Reading comprehension, phonetic and structural analysis skills, vocabulary building.

Listening Skill Builders: Concentration, comprehension, recall, sense of time sequence.

Strengths

1. Reader Power Builders: finely divided continuum of readiness and skill development; enables the student to progress in small, logical steps from relatively easy to relatively difficult skills.

2. Reading Power Builders: self-correction: immediate feedback.
3. Reading Power Builders: very little teacher assistance necessary.

Weaknesses

1. Reading Power Builders: somewhat child-oriented, although not so much as to be invalid for adults.
2. Listening Skill Builders: fables and fairy stories; definitely too child-oriented for most adults to listen to with interest.

Suggested Uses

1. Reading Power Builders: independent work for students at levels 1-3.
2. Listening Skill Builders: material for cassette tapes, which can be made to release teacher time.
3. Listening Skill Builders: independent work for those students who have difficulty concentrating.
4. Listening Skill Builders: independent work for students for whom English is a second language.

Cautions

1. Reading Power Builders: some teacher assistance necessary; a student should always be guided through one or two complete lessons. Even though the lessons are largely self-instructional, a student should not be left to progress entirely on his own. Not only does he need to know that the teacher is interested in his progress, he also needs help occasionally and advice as to whether to skip a level.
2. Slow start advisable. A student should be started at a slightly lower level than he seems capable of. After he catches on, he can be skipped ahead. This is psychologically better than starting him too high and then having to drop him back.
3. Limited amount of material. Good as it is, it should not be used exclusively. The end result would inevitably be a student's exhausting all the material at one level and yet not being ready for the next level.

3. SRA IIa, IIb, IIc

Format

Kits (one for each: IIa, IIb, IIc) consisting of a multilevel series of readings and exercises, each on a

separate card. There are two types of readings, Power Builders and Rate Builders, with separate answer cards and student record books.

Focus

Power Builders: Reading range and comprehension, word and sentence analysis, vocabulary building.

Rate Builders: Promotion of rapid, intensive and efficient reading through the use of (three-minute) timed readings followed by a comprehension check.

Strengths

1. Finely divided continuum of readings and skill development; enables the student to progress in small, logical steps from relatively easy to relatively difficult skills.
2. Self-correction: immediate feedback.
3. Material interesting to adults.
4. Power Builders: very little teacher assistance necessary.

Suggested Uses

1. Power Builders: independent work for students at levels 2-4.
2. Rate Builders: in a group situation once or twice a week with a teacher to establish the correct level at which each student should read and to time the readings. The manual calls for a constant three minutes, but if that proves too brief at first, it can be extended to three and a half or four minutes and then gradually moved up to three minutes. Three readings should be given at each session, the first being a warm-up.
3. Group work; certain of the exercises, particularly those of vocabulary building--getting meaning from context--can be used as a class activity, each student working at his own level, but focusing on this particular type of problem.

Cautions

1. Power Builders: some teacher assistance necessary; a student should always be guided through one or two complete lessons. Even though the lessons are largely self-instructional, a student should not be left to progress entirely on his own. Not only does he need to know that the teacher is interested in his progress, he also needs help occasionally

and advice as to whether to skip a level.

2. Slow start advisable. A student should be started at a slightly lower level than he seems to be capable of. After he catches on, he can be skipped ahead. This is psychologically better than starting him too high and then having to drop him back.

3. Limited amount of material. Good as it is, it should not be used exclusively. The result would inevitably be a student's exhausting all the material at one level and yet not being ready for the next level.

4. Rate Builders: time pressure difficult for some students. In a group situation, each student should be given a reading at a low enough level so that he can succeed, moving higher as he gains confidence and facility. If a student cannot seem to succeed under time pressure, it can be suggested that he might like to try Rate Builders on his own, timing with a stop-watch. Often it is merely competition with the group which holds a student back.

5. Content of kits child-oriented. Because the content of Kits IIIa and b are more adult, it may be wise to shift to IIIa or b once the student's reading level is sufficiently high to cope with it (level 3 or above).

## 4. SRA IIIa, IIIb

### Format

Kits (one for each: IIIa and IIIb) consisting of a multilevel series of readings and exercises, each on a separate card. There are two types of readings, Power Builders and Rate Builders, with separate answer cards and student record books.

### Focus

Power Builders: Reading range and comprehension, word and sentence analysis, vocabulary building.

Rate Builders: Promotion of rapid, intensive and efficient reading through the use of (three-minute) timed readings followed by a comprehension check.

### Strengths

1. Finely divided continuum of reading and skill development; enables the student to progress in small, logical steps from relatively easy to relatively difficult skills.

2. Self-correcting: immediate feedback.

3. Material interesting to adults.
4. Power Builders: very little teacher assistance necessary.

Suggested Uses

1. Power Builders: independent work for students at levels 2-4.
2. Rate Builders: in a group situation once or twice a week with a teacher to establish the correct level at which each student should read and to time the readings. The manual calls for a constant three minutes, but if that proves too brief at first, it can be extended to three and a half or four minutes and then gradually moved up to three minutes. Three readings should be given at each session, the first being a warm-up.
3. Group work. Certain of the exercises, particularly those of vocabulary building--getting meaning from context--can be used as a class activity, each student working at his own level, but focusing on this particular type of problem.

Cautions

1. Power Builders: some teacher assistance necessary; a student should always be guided through one or two complete lessons. Even though the lessons are largely self-instructional, a student should not be left to progress entirely on his own. Not only does he need to know that the teacher is interested in his progress, he also needs help occasionally and advice as to whether to skip a level.
2. Slow start advisable. A student should be started at a slightly lower level than he seems to be capable of. After he catches on, he can be skipped ahead. This is psychologically better than starting him too high and then having to drop him back.
3. Limited amount of material. Good as it is, it should not be used exclusively. The result would inevitably be a student's exhausting all the material at one level and yet not being ready for the next level.
4. Rate Builders: time pressure difficult for some students. In a group situation, each student should be given a reading at a low enough level so that he can succeed, moving higher as he gains confidence and facility. If a student cannot seem to succeed under time pressure, it can be suggested that he might like to try Rate Builders on his own, timing with a stop-watch. Often it is merely competition with the group which holds a student back. If an SRA IIa, b, or c kit is available, it is often useful to use Rate Builders from this kit for those students who

are having difficulty completing the readings within the prescribed three minutes, while others in the class can be using Rate Builders from the IIIa or b kit.

## System for Success, Book 1

### Overview of the System

System for Success, Book 1 is designed to help the adult illiterate learn to read and write and to perform the four basic arithmetic operations. The book is divided into three sections: phonics chart, arithmetic lessons, and English lessons. An instructor's book contains valuable information on the use of these sections as a continuous and integrated program that will simultaneously build skill in reading, writing, spelling, computation, and English to the grade 5 or 6 level. This book is designed for teachers to use with a group.

Although the arithmetic section is not analyzed here, computational skills are a valuable part of any adult literacy program.

### Analysis of the System

#### Format

Phonics section: text containing charts and readings, but no written exercises.

Handwriting charts, arithmetic and English sections: workbook form, with spaces for written exercises. Instructor's book sequences the lessons, interspersing them with spelling exercises to be used after various phonics charts.

#### Focus

Phonics section: phonetic and structural analysis by means of word families.

Handwriting charts: formation of both manuscript and cursive letters.

Arithmetic section: addition, subtraction, multiplication (up to 3 digits), division (up to dividing 4 digits by 2 digits). Includes word problems.

English section: use of capitals, periods, and commas; sentence completion; letter writing; application

form completion.

Strengths

1. Phonetic (and orthographic) families well defined.
2. Readings following each phonics chart better than in many phonics books. That is, every effort is made to provide a definite context, not just meaningless sentences in isolation.
3. Suggestions in instructor's book work well.

Weakness

Not enough material in any of the sections to build a whole program, despite author's claim.

Suggested Uses

1. Phonics section: small-group work. It is not designed for independent work.
2. Phonics charts: excellent source of phonetic families for teacher to use in preparing materials.
3. Handwriting charts: independent work for student who needs to practise forming letters.
4. Arithmetic and English sections: source of materials which teacher may adapt.

Cautions

1. Not designed for independent work.
2. Limited material; needs a great deal of supplementation, particularly the English section.

# APPENDIX C

# THE ADULT BASIC EDUCATION TEACHER: A MODEL FOR THE ANALYSIS OF TRAINING

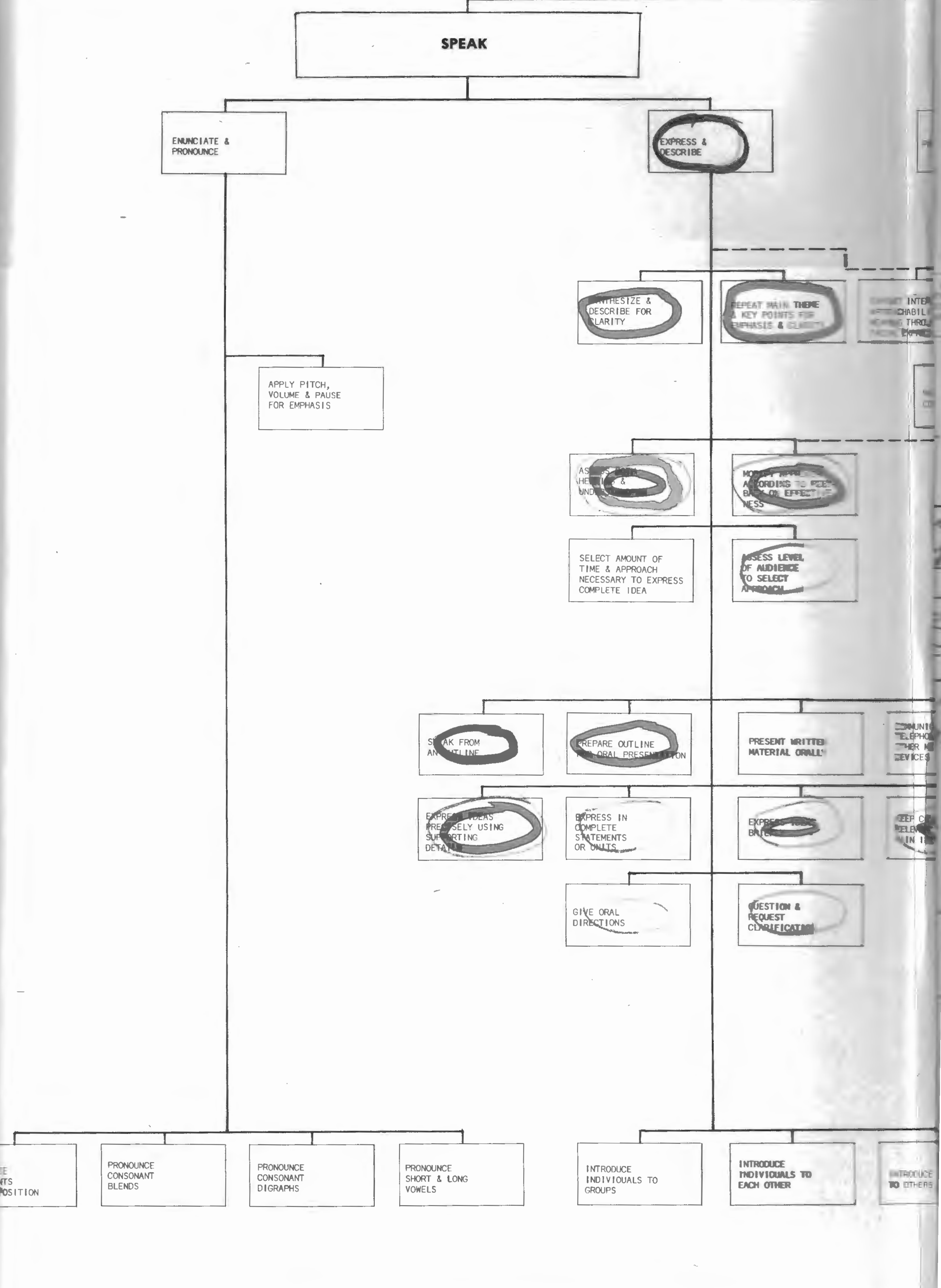
# THE ADULT BASIC EDUCATION TEACHER

## A MODEL FOR IDENTIFYING THE KNOWLEDGE, SKILLS, AND ATTITUDES WHICH THE ADULT BASIC EDUCATION TEACHER SHOULD POSSESS

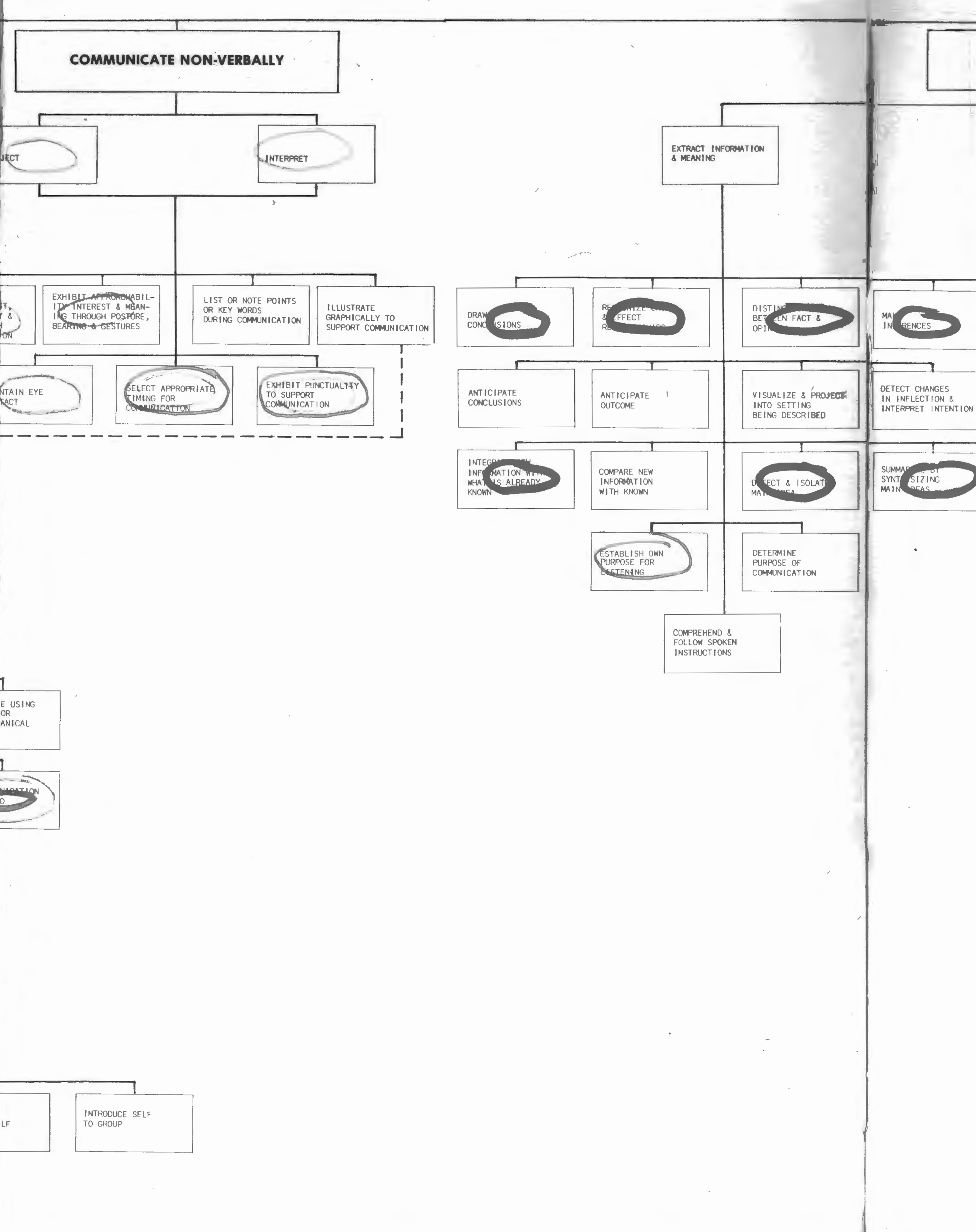
| KNOWLEDGE | SKILLS | ATTITUDES |
|---|---|---|
| **Of Subject Matter** | | |
| Content | Identify the characteristics of each subject.<br>Identify major topics to be dealt with in each subject.<br>Organize topics in logical sequence and, where possible, show relationships among them. | Enthusiasm for subject matter, expressed by showing students that material has value for them.<br>Eagerness to keep up to date on new developments in subject areas. |
| Methodology | See "Learning Process," below. | |
| **Of Student** | | |
| Physiological | Determine individual physical differences.<br>Determine signs of physical decline, including sensory deterioration. | Empathy with students, including patience with their problems and respect for their value systems and their modes of communication. |
| Psychological | Seek reasons for low self-concepts of individual students.<br>Raise their self-concepts, in order to improve motivation. | Capacity to be challenged by needs of students. |
| Sociological | Analyze socio-economic influences upon the lives of individual students.<br>Analyze the influences of sub-cultures with values and modes of communication different from those of the dominant society. | Positive desire to assist them to assume new roles in society. |
| **Of Learning Process** | | |
| Adult Learning Principles | Find ways to make subject matter relevant to students.<br>Proceed from the known to the unknown.<br>Move carefully from simple ideas to more complex ones.<br>Support abstract ideas or generalizations with facts.<br>Plan for active participation by individuals.<br>Allow time for students to assimilate information.<br>Have students apply immediately what they have learned, verbalizing it in order to retain it.<br>Reinforce learning, making students aware of their progress. | Conviction that adults are capable of learning, provided attention is given to their peculiar needs, as distinct from those of children.<br>Disposition to change direction in response to changing needs of students. |
| Adult Education Process | Develop a climate that will encourage students to participate actively in the learning process.<br>Diagnose learning problems, with special attention to physiological, psychological, and sociological differences that may affect motivation.<br>Help students set attainable, measurable objectives, expressed in behavioral terms and based on their needs.<br>Develop materials and utilize a variety of techniques and devices appropriate to subject matter.<br>Plan activities that bring resources of community to bear on needs of students.<br>Evaluate students, self, and program on basis of objectives set and on pre-assessment of students. | Interest in continuing his education, i.e., keeping up to date with new theories and practices, including technological developments.<br>Willingness to test new theories and practices with students. |

# APPENDIX D

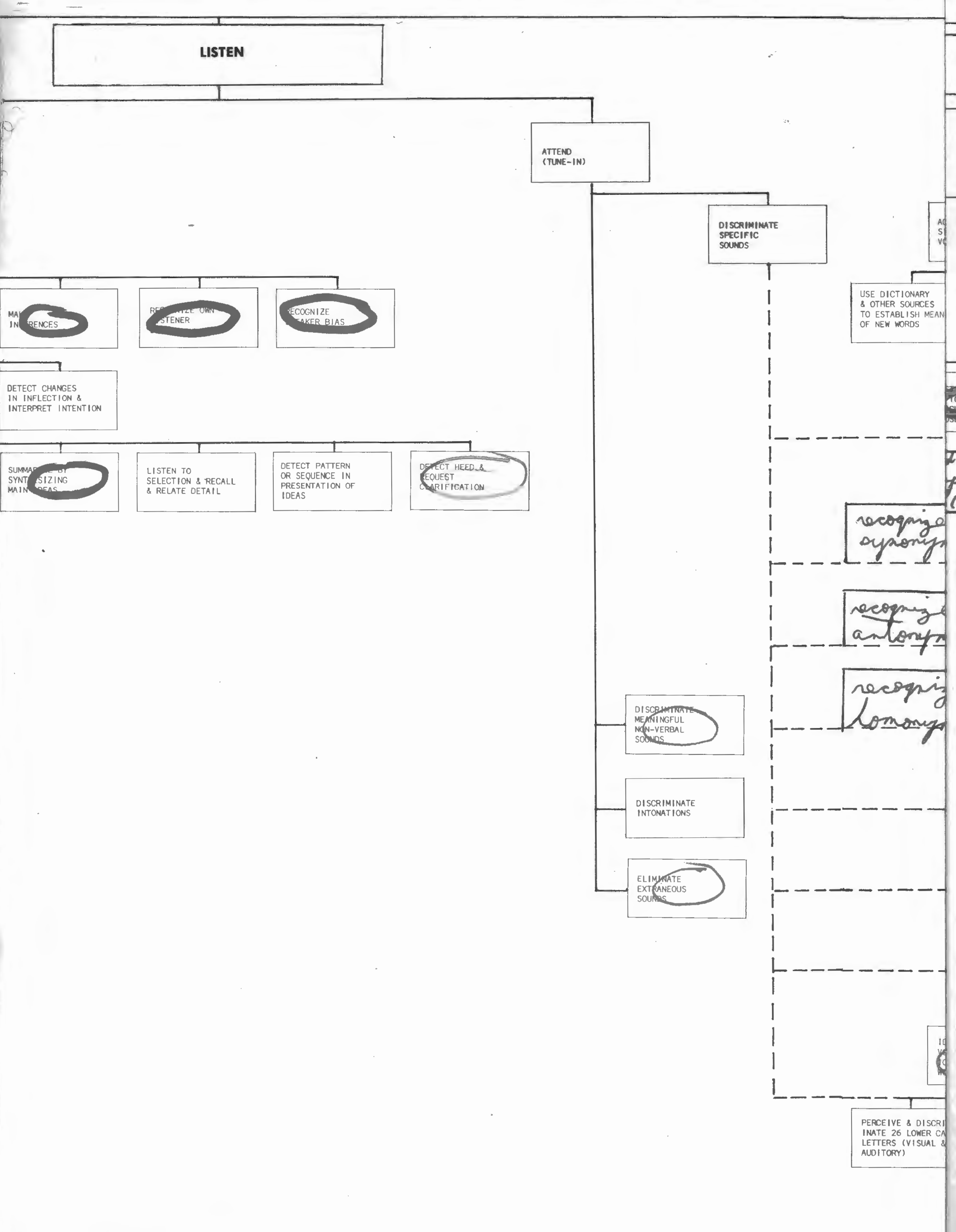
# FUNCTIONAL LITERACY CHART

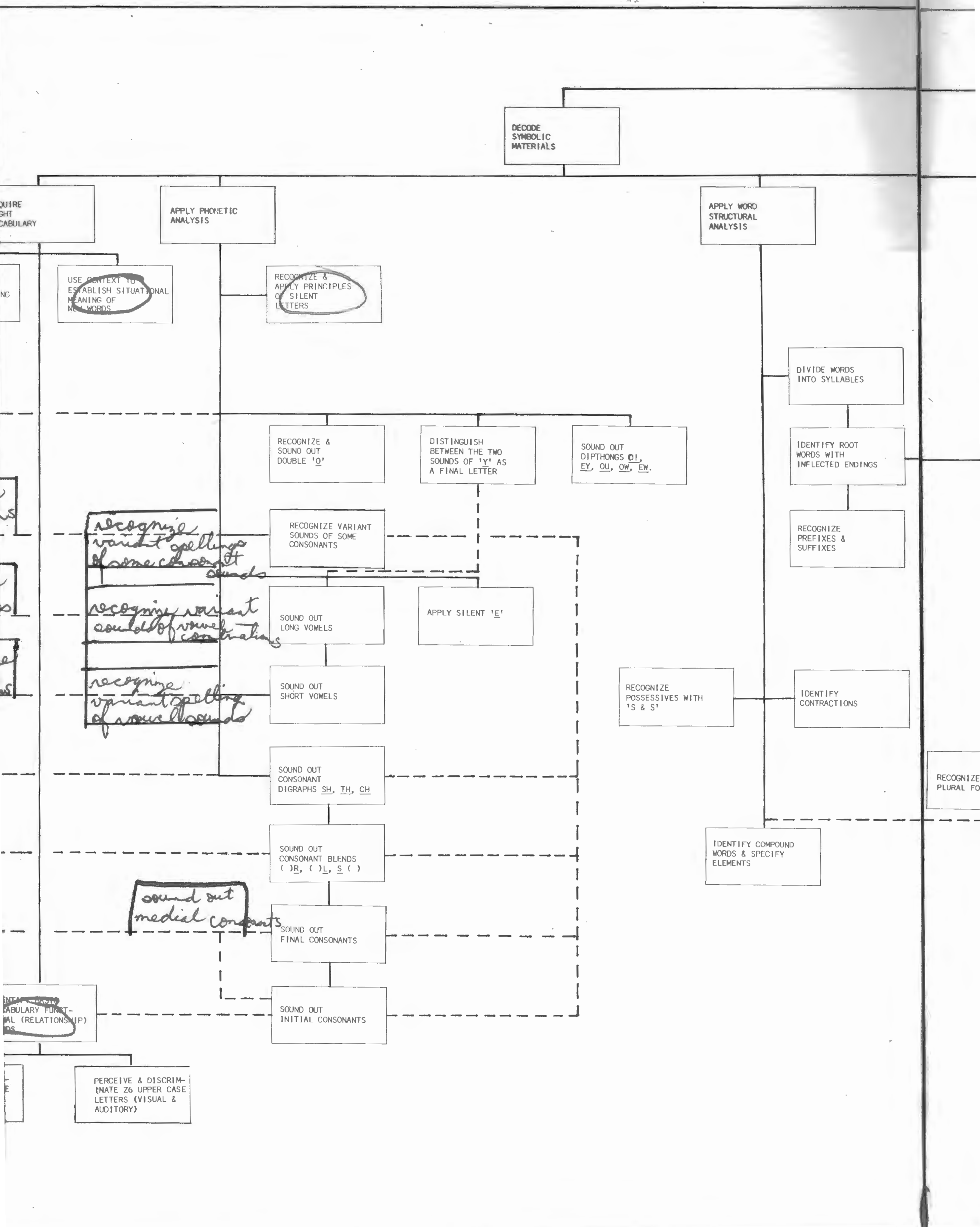


SPEAK
ENUNCIATE & PRONOUNCE
EXPRESS & DESCRIBE
SYNTHESIZE & DESCRIBE FOR CLARITY
REPEAT MAIN THEME & KEY POINTS FOR EMPHASIS & CLARITY
APPLY PITCH, VOLUME & PAUSE FOR EMPHASIS
SELECT AMOUNT OF TIME & APPROACH NECESSARY TO EXPRESS COMPLETE IDEA
ASSESS LEVEL OF AUDIENCE TO SELECT APPROACH
SPEAK FROM AN OUTLINE
PREPARE OUTLINE FOR ORAL PRESENTATION
EXPRESS IDEAS PRECISELY USING SUPPORTING DETAILS
EXPRESS IN COMPLETE STATEMENTS OR UNITS
GIVE ORAL DIRECTIONS
QUESTION & REQUEST CLARIFICATION
PRONOUNCE CONSONANT BLENDS
PRONOUNCE CONSONANT DIGRAPHS
PRONOUNCE SHORT & LONG VOWELS
INTRODUCE INDIVIDUALS TO GROUPS
INTRODUCE INDIVIDUALS TO EACH OTHER



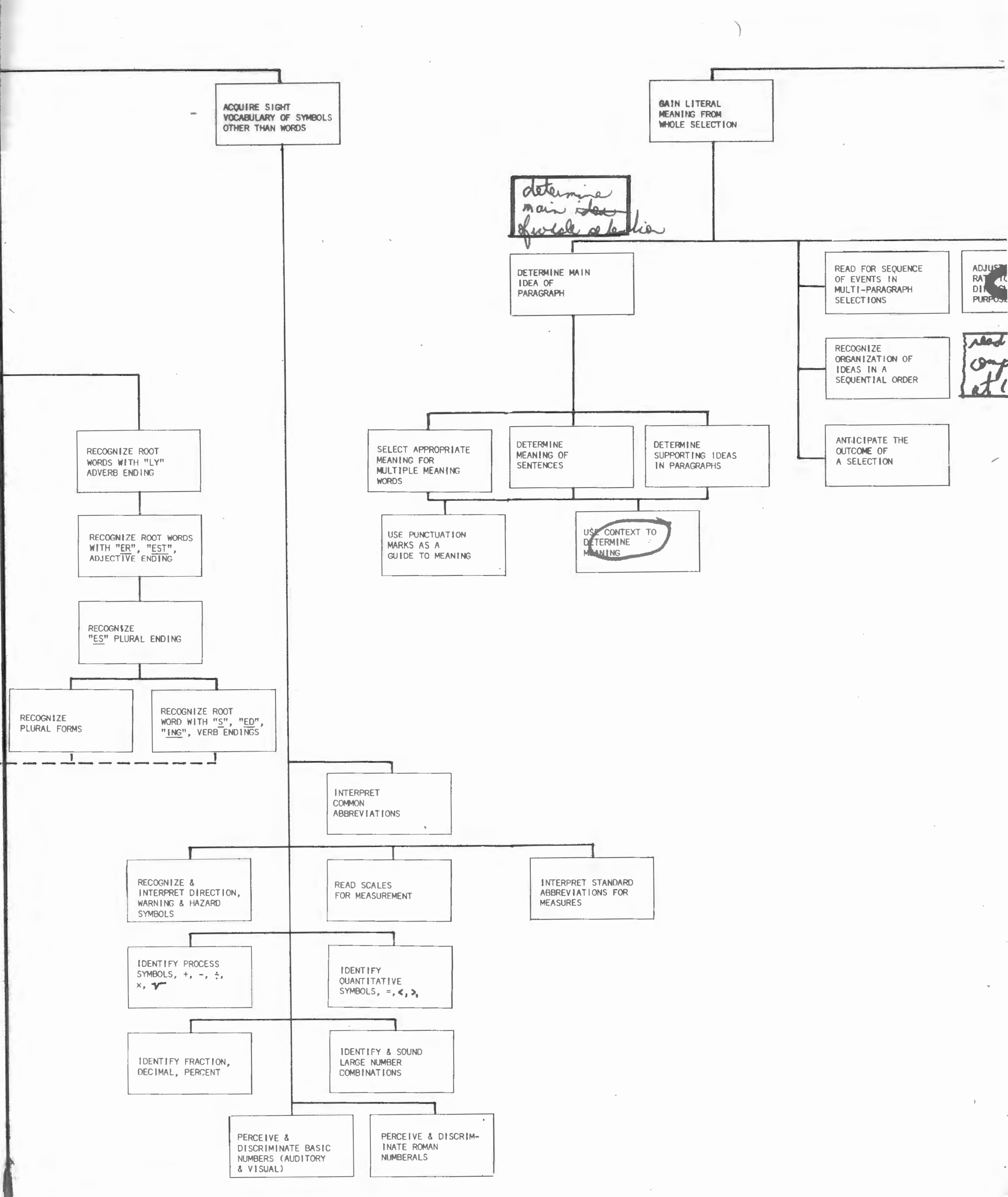
COMMUNICATE NON-VERBALLY
INTERPRET
EXTRACT INFORMATION & MEANING
EXHIBIT APPROACHABIL- ITY, INTEREST & MEAN- ING THROUGH POSTURE, BEARING & GESTURES
LIST OR NOTE POINTS OR KEY WORDS DURING COMMUNICATION
ILLUSTRATE GRAPHICALLY TO SUPPORT COMMUNICATION
SELECT APPROPRIATE TIMING FOR
EXHIBIT PUNCTUALITY TO SUPPORT COMMUNICATION
ANTICIPATE CONCLUSIONS
ANTICIPATE OUTCOME
VISUALIZE & PROJECT INTO SETTING BEING DESCRIBED
DETECT CHANGES IN INFLECTION & INTERPRET INTENTION
COMPARE NEW INFORMATION WITH KNOWN
ESTABLISH OWN PURPOSE FOR
DETERMINE PURPOSE OF COMMUNICATION
COMPREHEND & FOLLOW SPOKEN INSTRUCTIONS
INTRODUCE SELF TO GROUP


LISTEN
ATTEND (TUNE-IN)
DISCRIMINATE SPECIFIC SOUNDS
USE DICTIONARY & OTHER SOURCES TO ESTABLISH MEAN OF NEW WORDS
RECOGNIZE SPEAKER BIAS
DETECT CHANGES IN INFLECTION & INTERPRET INTENTION
LISTEN TO SELECTION & RECALL & RELATE DETAIL
DETECT PATTERN OR SEQUENCE IN PRESENTATION OF IDEAS
DETECT HEED & REQUEST CLARIFICATION
recognize synonyms
recognize antonyms
recognize homonyms
DISCRIMINATE MEANINGFUL NON-VERBAL SOUNDS
DISCRIMINATE INTONATIONS
ELIMINATE EXTRANEOUS SOUNDS
PERCEIVE & DISCRIMINATE 26 LOWER CA LETTERS (VISUAL & AUDITORY)



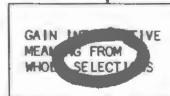
DECODE SYMBOLIC MATERIALS
QUIRE GHT CABULARY
APPLY PHONETIC ANALYSIS
APPLY WORD STRUCTURAL ANALYSIS
USE CONTEXT TO ESTABLISH SITUATIONAL MEANING OF NEW WORDS
RECOGNIZE & APPLY PRINCIPLES OF SILENT LETTERS
DIVIDE WORDS INTO SYLLABLES
RECOGNIZE & SOUND OUT DOUBLE 'O'
DISTINGUISH BETWEEN THE TWO SOUNDS OF 'Y' AS A FINAL LETTER
SOUND OUT DIPTHONGS OI, EY, OU, OW, EW.
IDENTIFY ROOT WORDS WITH INFLECTED ENDINGS
recognize variant spellings of some consonant sounds
RECOGNIZE VARIANT SOUNDS OF SOME CONSONANTS
RECOGNIZE PREFIXES & SUFFIXES
recognize variant sounds of vowel contractions
SOUND OUT LONG VOWELS
APPLY SILENT 'E'
recognize variant spelling of vowel sounds
SOUND OUT SHORT VOWELS
RECOGNIZE POSSESSIVES WITH 'S & S'
IDENTIFY CONTRACTIONS
SOUND OUT CONSONANT DIGRAPHS SH, TH, CH
RECOGNIZE PLURAL FO
SOUND OUT CONSONANT BLENDS ( )R, ( )L, S ( )
IDENTIFY COMPOUND WORDS & SPECIFY ELEMENTS
sound out medial consonants
SOUND OUT FINAL CONSONANTS
SOUND OUT INITIAL CONSONANTS
ABULARY FUNCT- IAL (RELATIONSHIP)
PERCEIVE & DISCRIMINATE 26 UPPER CASE LETTERS (VISUAL & AUDITORY)

READ

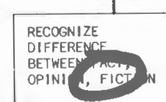


# FUNCTIONAL LITERACY

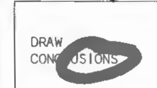
COMPREHEND SYMBOLIC MATERIALS



GAIN IN[illegible]TIVE MEA[illegible]G FROM WHO[illegible] SELECTI[illegible]S

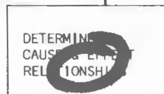


RECOGNIZE DIFFERENCE BETWEEN [illegible] OPINI[illegible], FICT[illegible]N

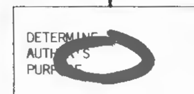


DRAW CON[illegible]USIONS

MAKE [illegible]CES



DETERMINE CAUS[illegible] RE[illegible]IONSHI[illegible]



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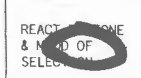
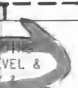


REACT [illegible]ONE & M[illegible]D OF SELE[illegible]

RECOGNIZE & INTERPRET FIGURATIVE LANGUAGE

IDENTIF[illegible] CHARACT[illegible] & SETTI[illegible]



[illegible]EVEL &

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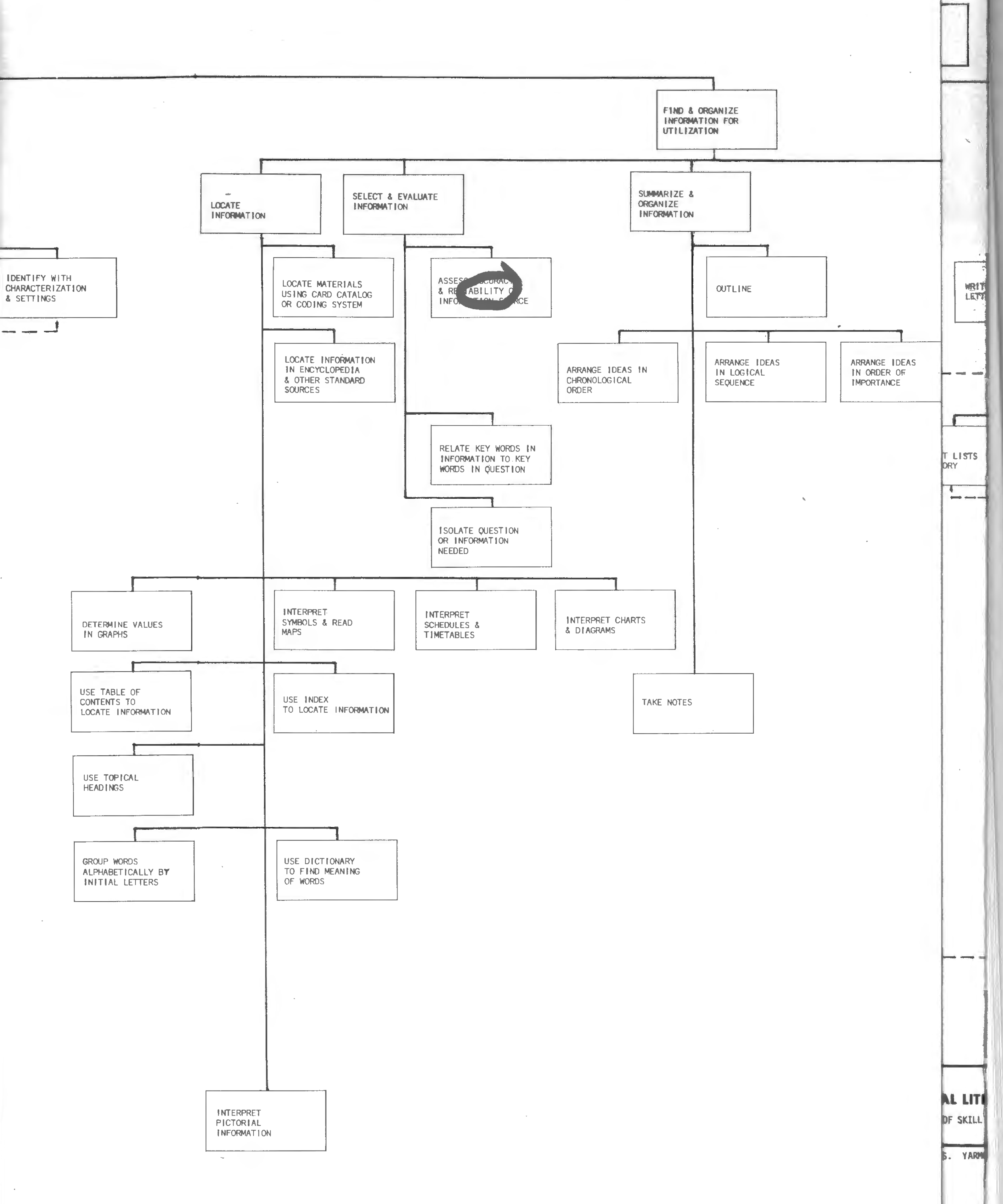
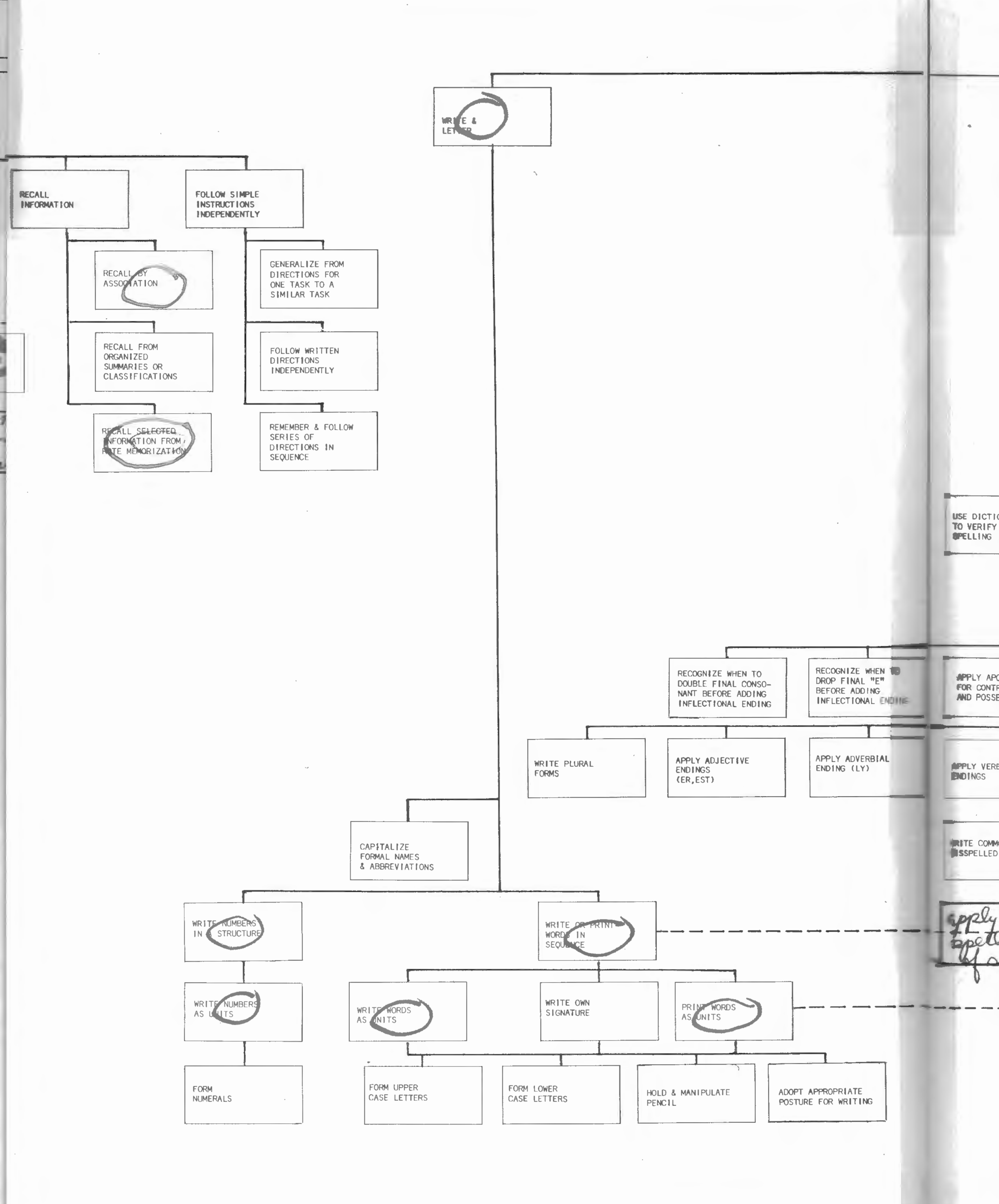
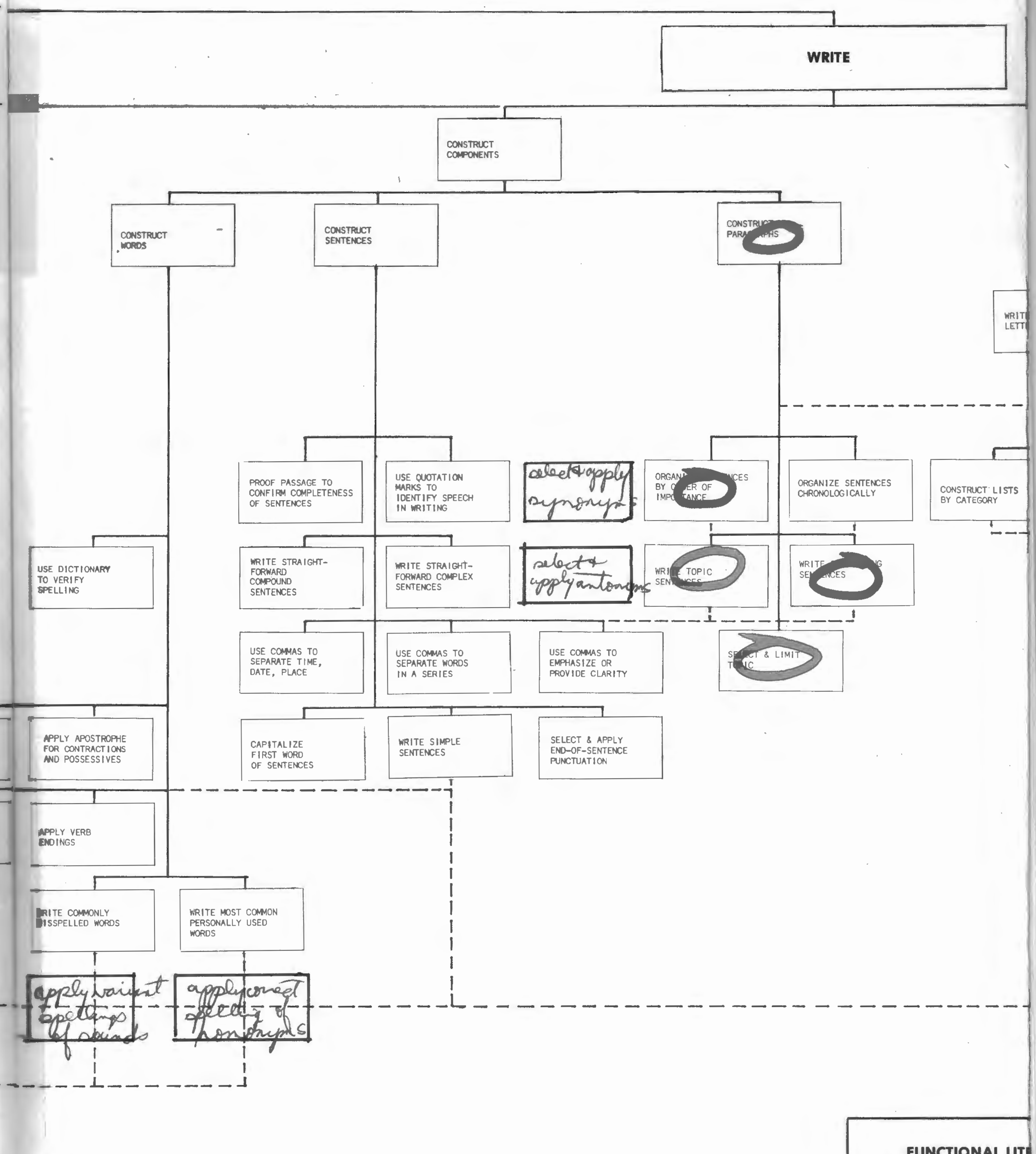

FIND & ORGANIZE INFORMATION FOR UTILIZATION
LOCATE INFORMATION
SELECT & EVALUATE INFORMATION
SUMMARIZE & ORGANIZE INFORMATION
IDENTIFY WITH CHARACTERIZATION & SETTINGS
LOCATE MATERIALS USING CARD CATALOG OR CODING SYSTEM
OUTLINE
LOCATE INFORMATION IN ENCYCLOPEDIA & OTHER STANDARD SOURCES
ARRANGE IDEAS IN CHRONOLOGICAL ORDER
ARRANGE IDEAS IN LOGICAL SEQUENCE
ARRANGE IDEAS IN ORDER OF IMPORTANCE
RELATE KEY WORDS IN INFORMATION TO KEY WORDS IN QUESTION
ISOLATE QUESTION OR INFORMATION NEEDED
DETERMINE VALUES IN GRAPHS
INTERPRET SYMBOLS & READ MAPS
INTERPRET SCHEDULES & TIMETABLES
INTERPRET CHARTS & DIAGRAMS
USE TABLE OF CONTENTS TO LOCATE INFORMATION
USE INDEX TO LOCATE INFORMATION
TAKE NOTES
USE TOPICAL HEADINGS
GROUP WORDS ALPHABETICALLY BY INITIAL LETTERS
USE DICTIONARY TO FIND MEANING OF WORDS
INTERPRET PICTORIAL INFORMATION



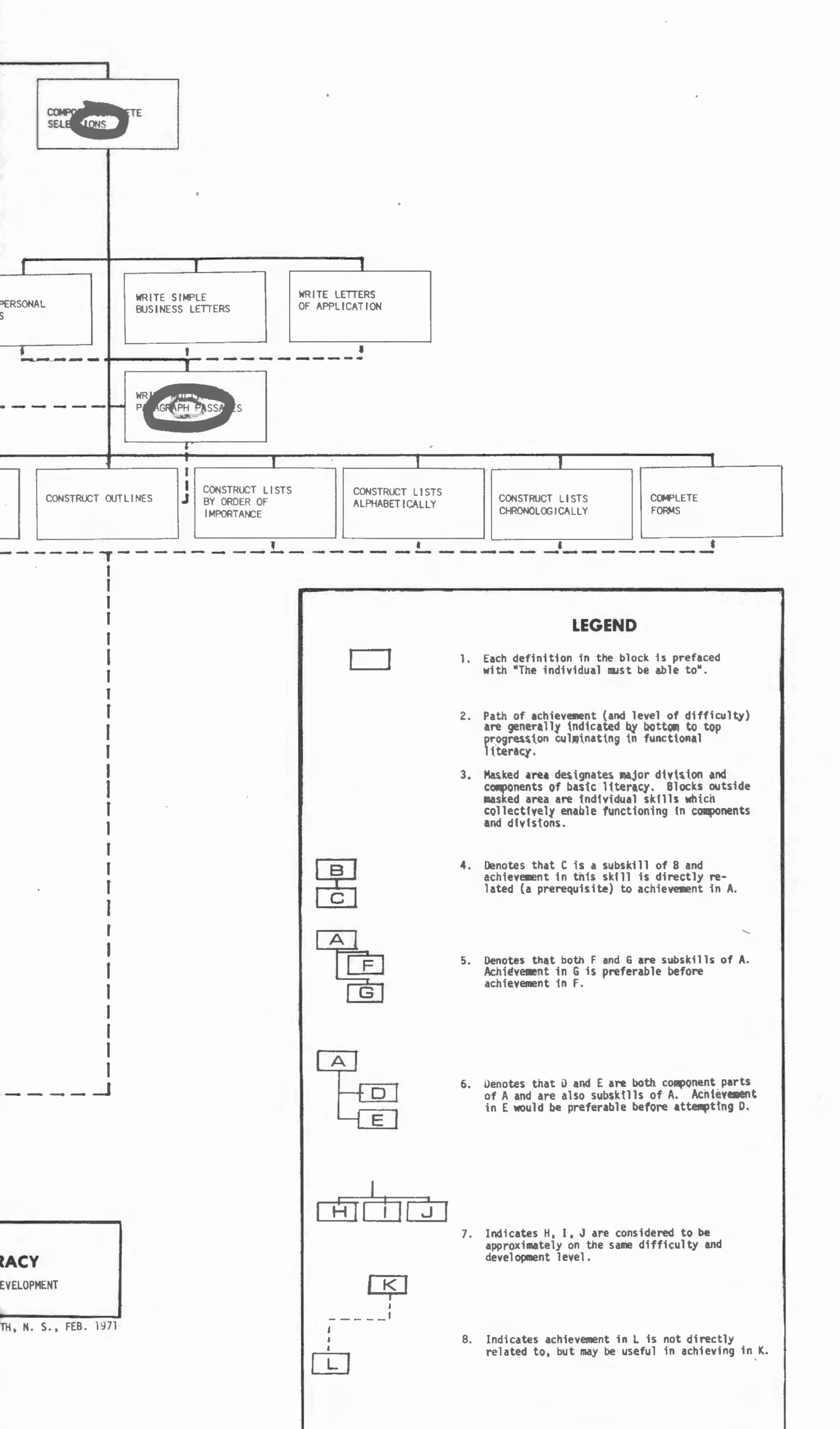
RECALL INFORMATION
FOLLOW SIMPLE INSTRUCTIONS INDEPENDENTLY
RECALL BY ASSOCIATION
RECALL FROM ORGANIZED SUMMARIES OR CLASSIFICATIONS
RECALL SELECTED INFORMATION FROM ROTE MEMORIZATION
GENERALIZE FROM DIRECTIONS FOR ONE TASK TO A SIMILAR TASK
FOLLOW WRITTEN DIRECTIONS INDEPENDENTLY
REMEMBER & FOLLOW SERIES OF DIRECTIONS IN SEQUENCE
USE DICTI
TO VERIFY
SPELLING
RECOGNIZE WHEN TO DOUBLE FINAL CONSO-NANT BEFORE ADDING INFLECTIONAL ENDING
RECOGNIZE WHEN TO DROP FINAL "E" BEFORE ADDING INFLECTIONAL ENDING
APPLY APO
FOR CONTR
AND POSSE
WRITE PLURAL FORMS
APPLY ADJECTIVE ENDINGS (ER,EST)
APPLY ADVERBIAL ENDING (LY)
APPLY VERB
ENDINGS
WRITE COMM
MISSPELLED
CAPITALIZE FORMAL NAMES & ABBREVIATIONS
WRITE NUMBERS IN STRUCTURE
WRITE OR PRINT WORDS IN SEQUENCE
WRITE NUMBERS AS UNITS
WRITE WORDS AS UNITS
WRITE OWN SIGNATURE
PRINT WORDS AS UNITS
FORM NUMERALS
FORM UPPER CASE LETTERS
FORM LOWER CASE LETTERS
HOLD & MANIPULATE PENCIL
ADOPT APPROPRIATE POSTURE FOR WRITING




FUNCTIONAL LIT

FUNCTIONAL STRUCTURE OF SKILL

M.S.M.S. YARM



PERSONAL
WRITE SIMPLE BUSINESS LETTERS
WRITE LETTERS OF APPLICATION
CONSTRUCT OUTLINES
CONSTRUCT LISTS BY ORDER OF IMPORTANCE
CONSTRUCT LISTS ALPHABETICALLY
CONSTRUCT LISTS CHRONOLOGICALLY
COMPLETE FORMS
LEGEND
1. Each definition in the block is prefaced with "The individual must be able to".
2. Path of achievement (and level of difficulty) are generally indicated by bottom to top progression culminating in functional literacy.
3. Masked area designates major division and components of basic literacy. Blocks outside masked area are individual skills which collectively enable functioning in components and divisions.
B
C
4. Denotes that C is a subskill of B and achievement in this skill is directly related (a prerequisite) to achievement in A.
A
F
G
5. Denotes that both F and G are subskills of A. Achievement in G is preferable before achievement in F.
A
D
E
6. Denotes that D and E are both component parts of A and are also subskills of A. Achievement in E would be preferable before attempting D.
H
I
J
7. Indicates H, I, J are considered to be approximately on the same difficulty and development level.
K
L
8. Indicates achievement in L is not directly related to, but may be useful in achieving in K.
FEB. 1971

# APPENDIX E

## AN ENUMERATION OF THE SKILLS INVOLVED IN LITERACY

## AN ENUMERATION OF THE SKILLS INVOLVED IN LITERACY

### I. PHONETIC ANALYSIS

A. Auditory perception and discrimination

B. Visual perception and discrimination

C. Letters
  1. Perceive and discriminate letters
  2. Recognize alphabetical order

D. Association of sounds and letters
  1. Sound out initial consonants
  2. Sound out final consonants
  3. Sound out short vowels
  4. Sound out final consonant clusters
  5. Sound out initial consonant blends & digraphs
  6. Sound out "r" - controlled vowels
  7. Sound out long vowels with final "e"
  8. Sound out long vowels with two vowels together
  9. Sound out diphthongs
  10. Sound out double "oo"
  11. Recognize variant spellings of vowel sounds & variant sounds of vowel spellings
  12. Distinguish between the two sounds of "y" as a final letter
  13. Recognize variant sounds of some consonants
  14. Recognize variant spellings of consonant sounds
  15. Recognize and apply principles of silent consonants

### II. STRUCTURAL ANALYSIS

A. Identify compound words & specify elements

B. Recognize plural forms

C. Verb forms:
  1. Recognize root words with "s", "ed", "ing" endings
  2. Recognize irregular past tense forms

D. Recognize "er" & "est" adjective & adverb endings

E. Recognize root words with "ly" adverb (& adjective) endings.

F. Identify contractions

G. Recognize possessives with 's & s'

H. Recognize prefixes & suffixes

I. Divide words into syllables & sound out

# III. COMPREHENSION

## A. Listening

1. Determine own purpose for listening
2. Listen to selection and recall & relate detail
3. Detect pattern or sequence in presentation of ideas
4. Determine main idea
5. Anticipate outcome
6. Recognize cause & effect relationship
7. Draw conclusions
8. Make inferences
9. Summarize by synthesizing main and supporting ideas
10. Distinguish between fact & opinion

## B. Reading

1. Word level
   - (a) Use context to determine meaning of words
   - (b) Select appropriate meaning for multiple-meaning words
2. Sentence level
   - (a) Use punctuation marks as a guide to meaning
   - (b) Determine meaning of sentences
   - (c) Recognize and interpret figurative language
3. Paragraph level
   - (a) Read and recall and relate details
   - (b) Read for sequence of events
   - (c) Determine main idea
   - (d) Recognize cause & effect relationships
   - (e) Determine supporting ideas in paragraph
4. Whole selection level
   - (a) Determine own purpose for reading
   - (b) Read & recall & relate details
   - (c) Read for sequence of events
   - (d) Determine main idea
   - (e) Anticipate outcome
   - (f) Recognize cause and effect relationships
   - (g) Draw conclusions
   - (h) Make inferences
   - (i) Summarize by synthesizing main & supporting ideas
   - (j) Recognize difference between fact, opinion and fiction
   - (k) Determine author's purpose
   - (l) Adjust reading rate to level of difficulty and purpose
   - (m) Read with 70-80% comprehension at 175 words per minute

IV. VOCABULARY

A. Identify basic vocabulary (from specified lists)

B. Develop vocabulary (for both immediate recognition and meaning)

C. Use context to establish situational meaning of new words

D. Recognize homonyms

E. Recognize synonyms & antonyms

F. Recognize and interpret direction, warning and hazard words and symbols

G. Interpret common abbreviations

H. Use dictionary to find meaning of new words

V. USE REFERENCE MATERIALS

A. Become familiar with common sources of information
1. Menus
2. Telephone book (with yellow pages)
3. Dictionaries
4. Newspapers
5. Magazines
6. Specialists & agencies
7. Maps (and Atlas)
8. Encyclopedias
9. Timetables & schedules
10. Library

B. Learn how to locate information in books generally
1. Use table of contents
   (a) to gain familiarity with book
   (b) to find specific sections or chapters
2. Use index to locate information
3. Isolate information needed
4. Skim for specific information

C. Use dictionaries
1. Note and use alphabetical order
2. Use guide words as an aid in finding words
3. Use entry words and illustrations to find meaning
4. Use diacritical marks for pronunciation
5. Use dictionary to check spelling

D. Use maps (& atlas)

1. Select appropriate map
2. Read and use captions, keys and legends on map
3. Use maps to locate places
4. Use maps to determine distance & direction
5. Use maps to develop spatial relationships

E. Use encyclopedias

1. Become familiar with the format of various encyclopedias
2. Use guide letters and/or index volume to select appropriate volume
3. Isolate information needed
4. Use index to locate specific information regarding subtopics
5. Use topical headings to locate topic

F. Determine values in graphs

1. Interpret bar graphs
2. Interpret line graphs
3. Interpret circle graphs
4. Interpret pictorial graphs

G. Interpret schedules & timetables

H. Interpret charts and diagrams

I. Use library

1. Use author, title and subject cards
2. Find fiction books as alphabetized by author's name
3. Make (broad) use of Dewey Decimal system to locate books on shelf

VI. WRITING & SPELLING

A. Word level

1. Print upper case letters
2. Print lower case letters
3. Write upper case letters
4. Write lower case letters
5. Write (or print) words as units
6. Write (or Print) words in sequence
7. Write most common personally used words
8. Write plural forms
9. Apply verb endings
10. Apply rule for doubling final consonant before adding inflectional endings
11. Apply rule for dropping final "e" before adding inflectional endings

12. Apply rule for changing "y" to "i" before adding inflectional endings
13. Apply "er", "est" adjective (& adverb) endings
14. Apply "ly" adverb endings
15. Apply irregular spellings
16. Apply correct spelling of homonyms
17. Write commonly misspelled words
18. Apply apostrophe for contractions and possessives

B. <u>Sentence level</u>

1. Capitalize first word of sentence
2. Write simple sentences
3. Select & apply end of sentence punctuation
4. Use commas to separate time, date, place
5. Use commas to separate words in a series
6. Use commas to provide clarity

C. <u>Complete forms</u>

1. Motel registrations
2. Checks
3. Deposit slips
4. Receipts
5. Order forms
6. Sales slips
7. Application for license
8. Application for jobs
9. Application for unemployment