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ABSTRACT

One purpose of the International Reading Association (IRA)--to improve the quality of reading instruction at all levels--was discussed. The topic was divided into three parts: Developmental Reading, The International Challenge, and The Role of IRA. The substance of the first part was based on the theoretical model of reading described by Gray in 1960 as the "Major Aspects of Reading," with several references made to Carroll's description of the nature of the reading process. The components described were word recognition, comprehension, reaction to and evaluation of ideas, and assimilation of the materials read. The International Challenge called for solutions to the following basic problems: (1) adult illiteracy, (2) language differences as an obstacle to higher education, (3) the conception of education as a preparation for white collar work only, and (4) the shortage of teachers. Finally, contributions that IRA could make to the solving of worldwide developmental reading problems were offered, including sponsoring comparative studies in reading, acting as a clearinghouse for international publications on reading, and arranging international exchange teachers and scholars. References are included. (DH)

DEVELOPMENTAL READING: AN INTERNATIONAL CHALLENGE

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On December 13, 1967, the United Nations adopted Resolution 2306 designating 1970 as the first International Education Year. At a meeting in November of the following year, Unesco's member states were invited to launch programs to study and appraise their current educational situations, increase their financial resources, and eliminate discrimination. In implementing these programs, the states were urged to focus attention on eight aspects:

> ...1) functional literacy for adults, 2) equal access of girls and women to education, 3) training of middle and higher level personnel for development, 4) democratization of secondary and higher education, 5) transition from selection to guided choice in secondary and higher education, 6) adaptation of education (both general and technical) to the needs of the modern world, especially in rural areas, 7) development of educational research, and 8) preservice and in-service education of teachers. (1)

It seems especially fitting that the Third World Congress of the International Reading Association is convened this year to consider further the role and function of reading in our contemporary world. The purposes of the Association are uniquely bound to educational advancement, for literacy forms the basis on which further development rests. These purposes are:
1) to improve the quality of reading instruction at all levels,
2) to develop an awareness in our citizenry of the impact of reading,

3) to promote the development among all peoples of a level of reading proficiency that is commensurate with each individual's unique capacity, and 4) to sponsor conferences and meetings to implement the purposes of the Association. It is in relation to the first of these--the improvement of reading instruction--that the following remarks are presented against an international setting. *

Developmental Reading

The term developmental refers to an evolutionary change in character through successive periods, which results in a better, fuller, or more useful stage of advancement. In order to determine the direction of change or the desired stage of arrival for complete development, an ideal model or prototype must be created or accepted to serve as a standard. Developmental reading, as defined by Harris, applies to "activities ... in which the main purpose of the teacher is to bring about an improvement in reading skills--activities in which learning to read is the main goal."(2) In essence, all teaching of reading could be considered developmental in that instruction ought to proceed from where an individual is and continue forward to upgrade his stage of development to a higher level. This assumes that progressively higher stages of development are defined and that means of achieving them have been determined.

The theoretical construct of the reading process and the stages of development that indicate progress toward maturity in reading have received considerable attention in recent years.

One of the first such analyses was described in 1960 by Gray as "Major Aspects of Reading." The four aspects which he analyzed were word perception, which involved "the arousal of both meaning and pronunciation associations;" comprehension, which involved "a clear grasp of the meaning of what is read;" "the reader's reaction to and evaluation of the ideas secured;" and the assimilation of the material, which is "achieved by the fusion of the new ideas acquired through reading with previous experiences." (3) This description was later amplified and refined by Robinson in 1966.(4)

The recent IRA publication entitled Theoretical Models and Processes of Reading, which is dedicated to the late Jack Alroy Holmes, presents a compilation and critique of the several reading models which have been devised. In this volume, Carroll presents a lucid description of the nature of the reading process based upon current knowledge regarding the state of the art. He describes learning to read in eight stages, as follows:

1. The child must know the language he is going to learn.

2. The child must learn to dissect spoken words into component sounds.

3. The child must learn to recognize and discriminate the letters of the alphabet in their various forms (capitals, lower case letters, printed, and cursive.)

4. The child must learn the left to right principle by which (English) words are spelled and put in order in continuous text.

5. The child must learn that there are patterns of highly probable correspondence between letters and sounds, and he must learn those patterns of correspondence that will help him recognize words that he already knows in his spoken language or that will help him in determining the pronunciation of unfamiliar words.

6. The child must learn to recognize printed words from whatever cues he can use--their total configuration, the letters composing them, the sounds represented by those letters, and/or the meanings suggested by the context.

7. The child must learn the printed words are signals for spoken words and that they have meanings analogous to those of spoken words. While decoding a printed message into its spoken equivalent, the child must be able to apprehend the meaning of the total message in the same way he would apprehend the meaning of the corresponding spoken message.

8. The child must learn to reason and think about what he reads within the limit of his talent and experience. (5)

These components of the reading process are operative for readers of any age, not just children, and of any language, though obviously left-to-right movements would need to be adjusted according to the nature and the structure of the language.

In his Unesco study, Gray analyzed eye movements of readers in several languages--three alphabetic languages in which lines are read left to right (Thai, French, and English), three other alphabetic languages which differed widely in the type of letter used (Spanish, Burmese, and Hindi), three alphabetic languages in which lines are read from right to left (Arabic, Hebrew, and Urdu), three Oriental languages with different types of characters (Chinese, Japanese, and Korean, which were printed in horizontal rows because of the limitations of the camera), and good and poor readers of Yoruba (a native Nigerian language) and of Navaho (American Indian). The eye movement records from these various readers showed:

> ...the general nature of the reading act is essentially the same among all mature readers....

> The mature reader has mastered the basic attitudes and skills required for good oral reading and fluent, thoughtful silent reading. Irrespective of the form and structure of the language, these attitudes and skills include a thoughtful reading attitude, accuracy and independence in recognizing words, a reasonably wide span of recognition, the regular forward movements of the eyes along the lines with only such regressive movements as are necessary, the accurate return sweep of the eyes from the end of one line to the beginning of the next, the fusing of separate words and groups of words into the ideas they represent, and the ability to interpret those ideas. (6)

If both mature readers and those learning to read utilize similar basic skills and attitudes, and if Carroll's eight stages are accepted as a fair estimation of the reading act, the problem for teachers then becomes the implementation of these steps into an instructional program. While these stages are generally accepted and supported by research, their sequence is still a point of argument. The order in which Carroll presented them is supported by those who wish an early decoding emphasis, whereas others who prefer to use configuration as the initial step would reorder the sequence and place item 6 as the second step, followed by 7, 8, 4, 3, 2, and 5. Ultimately, mature readers read whole words at sight; it is only when the word is unknown or unusual that their rate slows down and individual letters within the word are noted. Whatever word recognition techniques the reader possesses are then brought into play, and he figures out the pronunciation of the word or an approximation which later may be checked with the dictionary.

Pupils who are being taught to read, regardless of their age or the sequence by which the stages are presented, will need

special help and exercises if at any stage they do not make progress. In designing a developmental reading program, it is important that instruction be based upon the knowledge which research and experimentation have provided so that aspects can be included which will prevent such blocking and facilitate learning.

Word recognition.--Certain important questions need to be asked if an instruction is to be effective. The first relates to word recognition. How does an individual learn to recognize a word in his own language? What cues are important to him? Recent studies by Bishop (7) indicate that subjects who were given training in the sound-letter correspondence were superior to those who were given whole-word training in learning eight words in a new language (Arabic) and then were expected to transfer their method to the learning of other new words in the same language. The results showed the fewest trials were for the letter group, the next for the word group, and the largest number of trials for the control (untaught) group. Within the word group were subjects who had learned the new words by transferring their knowledge of letter correspondences which had been figured out during their word training. They did as well as the letter-trained group. The implication is clear that readers need sound-symbol relationships to apply when learning new words. Teachers have long known that bright students learn to read by noting and applying such correspondences without waiting to be taught. It is how preschool children who have

ready access to television also teach themselves.

In another set of experiments, the results suggested that there may be an advantage when learning to read English in developing a "set for diversity" by initiating reading with less regular patterns rather than maintaining a similarity in endings or in other ways preserving the single variable. (8) By having such experience in his early learning, a pupil thus anticipates the variability of vowel sounds and expects to look for cues that will help him decide the exact sound represented in the word he wants to know.

Other questions relate to the order of introduction of the components of the recognition system. At the present time, there is no research that indicates the superiority of any one scheme or sequence over another. My conjecture is that the sequence is not the crucial element; it is the fact that there is a sequential, planned order which the teacher knows and uses that makes the difference.

Comprehension.--Once the words are recognized, how do skilled readers process the language to comprehend at various levels of depth material they can reduce to speech or recognize during silent reading? Comprehension is based on the reader's meaning vocabulary, and those who possess a large, varied, and accurate knowledge of word meanings have a superior background to apply when they read. One of the objectives of the Head Start programs for preschool children in the United States is to develop their meaning vocabularies--to give them concepts and labels

for the concepts that will increase their store of word meanings as preparation for reading. Some secondary schools have instituted courses in vocabulary building for college-bound pupils so that they can improve their ability to cope with the range and amount of reading material they are expected to master.

Technical vocabulary in science, proper names and abstract concepts in social studies, mathematical terms, and literary devices are extensions in the content subjects of the same need for the reader to possess an adequate meaning vocabulary.

Beyond the meaning of words in context is the necessity for the reader to grasp meaning units of increasing size--phrases, sentences, paragraphs, sections, chapters, and even whole books. He must be able to see the total in perspective and to understand how the parts contribute to that total. Too often pupils concentrate on the minutiae of a single part and omit seeing this part in relation to the whole, like the blind men and the elephant, each of whom thought he knew what the elephant was like, even though he had only felt an ear, trunk, or tail.

To understand the whole requires the ability to see the skeleton, the author's framework around which he organizes his ideas. Knowing the relationships denoted by various connectives, such as however, nevertheless, moreover, in addition to, furthermore, consequently, meanwhile, but, and, for, and if, allows the reader to comprehend the flow of thought from paragraph

to paragraph and to see the way the ideas fit together. For textbook material, the organization is often logical, with main ideas supported by their details presented in a heirarchy of importance or sequential order. Other types of materials may be presented in chronological order, such as found in histories, biographies, or a mystery story; in a dramatic style, as in a play; or in a psychological manner, designed to capture the attention of the reader immediately, then through flashbacks in a story or by an abrupt shift to another pattern continues the presentation in less dramatic fashion. Pupils who demonstrate the ability to see the total have arrived at the seventh level in Carroll's ~~finest~~ list.

The eighth level requires the pupil to "reason and think" about what he reads. Reasoning and thinking will be necessary for the pupil to interpret beyond the lines of print in order to comprehend what the message really is. The several requisite skills have been differently defined by reading authorities, but generally include sensing the author's purpose, finding causes, reasons, or agents, determining the mood or tone of a selection, analyzing characters and their motives, noting relationships not specifically given, drawing conclusions and making generalizations, and speculating between events and beyond the data. Each of these aspects of interpretation need attention in the instruction given pupils, and teachers can implement them by asking the kinds of questions that will require pupils to relate the literal message to their previous knowledge and to other information as they interpret the ideas.

Another aspect of the "reading and thinking" stage is that of evaluation or critical reading, which involves judging the value, truth, or quality of the statements against a known standard or norm. For literature, this entails judging the theme, plot, characters, style, setting, and ethic of the selection, as well as the author's purpose for writing it. For science, this includes evaluating the clarity, accuracy, recency, and applicability of the ideas; for social studies it means accuracy in detail and in perspective, objectivity in presentation, and clarity in the descriptions and graphic representations.

A crucial aspect of critical reading concerns the detection of propaganda and an analysis of its concepts and arguments. The seven techniques usually employed have been delineated as: bad names, glad names, transfer, testimonial, plain folks, band-wagon, and card stacking. Each should be identified, analyzed, and evaluated according to criteria previously mentioned--accuracy, perspective, objectivity. A fruitful source of material for study in the United States is provided by advertisements in magazines. Our twelve- to fourteen-year-olds delight in analyzing these and detecting the devices used; this forms a useful background for the detection of political propaganda later in their school careers. Another fruitful source for study are the cartoons in the daily newspaper and weekly news magazines, though many of these are too sophisticated for the elementary school child.

At a higher stage of comprehension is the reader's reaction, both mentally and, emotionally, to what he has read. This

reaction may take the form of amusement or laughter, or a subtle, less obvious appreciation; it may evoke tears, storming, or ranting and raving; it may stimulate letters to the editor, and it may set forth a barrage of rebuttal. Writing that makes a difference to the reader may have very tangible results--from fertilizing the needy earth or building a better home to reading Consumer's Guide or teacher's manuals. In fact, some writing is meant only to be applied; just reading it is insufficient to gain its full import.

Intellectual reaction may also be clothed in appreciation of the style of writing, the unique idea, the tidy arrangement of arguments, the vivid figures of speech, the originality of the organization. Critical reading may also evaluate not only the author's purpose for writing, but the applicability of the material to the reader's current purpose. As a result, he may form opinions on the basis of his reading. While factors in opinion-formation are complex, it is certain that what one reads does influence his ideas, else why promote education at all?

The highest level of reading and thinking is the reader's assimilation of the message into his background, the integration of the ideas with his own previous concepts, thus making the reading an integral part of his total personality. The evidence of this assimilation is found in his behavior, performing an act, making explanations, purchasing a product, voting a certain way, making a blueprint or a dam or a dress, playing a game, or arriving at his destination. His changed behavior

may be reflected in his mental health, his moral conduct, his social poise, his health and safety, his conversation, and in his self-concept, as he gains confidence in his personal worth.

Thus reading comes full circle,--from ignorance to knowledge that results in changed behavior--which is the central purpose of education, the "leading out" that the word itself means. The reader who asks "What does this mean to me?" is asking the important question from his reading, and the answers translated into action show the effect that reading can have. "Reading maketh," says Francis Bacon, "~~the~~ a full man."

The International Challenge

A major purpose of education is to perpetuate and advance the culture. In developed countries, those that utilize their resources optimally to provide a high quality of living for their inhabitants, education plays an important role. Commerce is based on money, requiring an abstract system of record-keeping; communications are written rather than verbal, providing an opportunity to restructure and clarify messages and serving as records of the transaction; and technology plays an essential role as the basis for economic development and quality of living.(9)

In some developing countries, technological changes have resulted in transportation shifting from oxcarts to 747's in one giant leap, while the customs and traditional ways of behaving remain static or move forward only by evolutionary rather than revolutionary means. This lack of synchronization creates

problems that must be alleviated, for the level of development depends upon the ability of the society to utilize the results of technology. Such use is based not on the scientific knowledge that created the goods but upon the level of the arts and sciences in the broadest sense that recognize the benefits to be gained from utilization.

The underdeveloped countries, those generally recognized as making less than optimum use of their resources, are faced with poverty, hunger, and disease, which limit their opportunities for national and personal satisfaction.

Literacy.--The role of literacy in educational development is paramount. While the percentage of illiteracy in the world has declined to 33 per cent, the actual number has increased from 700 million to between 740 and 750 million and rises steadily each year." (10) While literacy figures are difficult to compute, for different standards are used in definition; nevertheless, the enormity of the problem is apparent.

A question must be raised regarding the value of adult literacy when no reading materials exist. This is also true for children, for in some instances little or no reading materials are provided for their use. Consider the problems faced by an underdeveloped society to write and print books (assuming a written form of the local vernacular exists), to announce their availability, to accept orders, then to deliver the books by means of slow and unreliable transportation methods. Factors like the size of the country, the distribution of the population, the

topography, and transportation routes and means must be balanced against the apparent economic gains and the contributions that literacy can make to promote national unity, provide for individual participation in government, and enhance the personal living of the people.

Another value gained from eradicating adult illiteracy may be the emphasis that is given to the education of the young. Adults in a society determine how the young shall be educated, allocate or pay the costs for such education, and nurture and staff the schools. If strides can be made in literacy for adults and children alike, the level for the nation as a whole should show a marked improvement.

In this connection, the United States, too, must make a major effort to teach adults and out-of-school youth to read. The International Reading Association this summer is sponsoring three workshops in Adult Education, under a United States Office of Education grant, to train teachers for adult literacy programs. These workshops are being held at Hofstra University on Long Island, at Colorado State College in Greeley, and at Florida State College in Tallahassee. The participants will scatter, once their training is completed, to develop programs in their local areas. Hopefully, their influence will extend widely and result in many adults learning to read.

Language.--A second problem in promoting the teaching of reading internationally depends upon language. If a person already can read in his native tongue, yet it is not the lingua

franca of the area, he might as well be illiterate, as many a world traveler can corroborate. What shall the language of instruction for an area be? In the United States, this problem arises in areas with a concentration of Spanish-Americans. In some cities, special schools are designated for teaching English as a second language; pupils are transferred to regular schools when they have learned to speak English. In other areas, instruction in the first three grades is conducted in Spanish as pupils are learning to speak English, then in grade four instruction is given in English.

In some countries, the language of instruction, particularly at secondary and higher levels, is that of the former colonial power. Here, entrance to these levels may be restricted to those élite groups who have the opportunity to learn the language. Entrance also favors those students who are apt in languages, but requirements may work to the detriment of students in engineering, who may not have the lingual ability and thus miss out in competition for places in higher education. The amount of time spent on foreign languages to prepare pupils for this system may also force out of the curriculum preparatory courses for pursuing technical subjects at higher levels. On the other hand, to require instruction in the language of the land may restrict greatly the resources available or necessitate the translation of technical materials. Such translation would need to be continued until such time as the country itself developed its scholarship to a level that would become self-sustaining.

Compulsory education.--A related problem is that of compulsory education. Can a nation divert its educational resources to provide compulsory education for all, even to a level of four to six years, and ignore needed improvements at secondary and higher levels? Certainly a parallel attempt must be made if primary education is to serve as the base from which pupils advance to higher levels, but the establishment of compulsory education may need to await the preparation of the teachers necessary to make this an actuality. Yet teachers are trained at higher institutions of learning; so the cycle continues, and planning must be done with foresight and realism.

Placement.--Still another problem concerns the expectation in many countries, not only those labeled "underdeveloped," that education prepares one for working more with the mind and less with the hands. Such attitudes are difficult to dispel, and the idea of an engineer, farmer, or craftsman as a university graduate is a difficult image to project. One practical solution suggests that industry and other employing institutions set up their own training systems, as is being done in several countries, including the United States. But the problem persists when a country produces an excess of civil servants and other white-collar workers at the expense of blue-collar workers, technicians, and craftsmen.

A means of circumventing the problem created by literacy has been to upgrade farmers and villagers by oral means, rather than literacy training. Thus the level of the community is raised

without draining off those who would accept and profit from the training and be lured to the metropolitan areas with their nonexistent clerical jobs, leaving the individual prey to frustration and disillusionment. The crux of a solution lies in pointing out to the rural population the opportunity to improve their area by utilizing their newly-acquired skills. This rather practical use of education calls for a different set of goals and standards of achievement. It requires an acceptance of the belief that education should be used as a means of improving one's ability to produce rather than as a means of avoiding work.

Teachers.--A shortage of qualified teachers poses still another problem. Adaptations must be made to increase the personnel for teaching without increasing the number of teachers. The hospitals in the United States introduced nurse's aides, teenage candy-stripers, Gray Ladies, and other semiprofessional and volunteer groups when they faced a shortage of registered nurses. Likewise, schools have absorbed teacher's aides, volunteer tutors, and lay readers of student papers to alleviate the pressure on regular teachers. Some adult literacy programs utilize "block mothers" in the ghetto. They go regularly for their literacy lessons, then transmit their knowledge to the other mothers in their block at a regularly scheduled meeting in someone's home. Iran has developed "tent schools" for nomadic tribesmen, where tents and teachers move with the tribes and provide daily open-air education. Australia's radio schools

are another adaptation to the exigencies of the situation, and other ingeneous methods need to be devised if all segments of the population are to be reached.

To increase the teaching force some schools have experimented with correspondence courses, and married women whose families are grown are enticed to return to teaching or to become qualified. In some countries where women are still denied equal education, their contribution as homemakers and mothers in the cultural education of their children needs to be recognized. According to Neff, their influence is "perhaps even more significant than the influence of the teacher on the student after he is in school." (11)

Increase in teaching can be accomplished by introducing prepared materials that free the teacher for personal contact with pupils--materials like taped lessons, programmed books, or teaching machines, where the learner can repeat until he understands the item, where the taped teacher has infinite patience, and where no one need know how many repetitions a pupil requires for mastery.

New ideas and new dimensions are required if education is to serve contemporary needs. Traditional concepts must be revised, as universities charter world cruises, as secondary schools operate without buildings, like Philadelphia's "School on the Parkway," as elementary pupils learn in museums, libraries, zoos, and factories, and as farms, industries, and government offices become scenes of study. Yet underlying these innovations

is the presupposition of literate pupils; reading is mandatory.

The Role of IRA

The problems of developmental reading that beset the nations of the world, from literacy to propaganda analysis can be solved only if direct attempts are made to do so. The challenge is clear to an international organization whose purpose is to improve reading. What are realistic contributions that the Association can make?

1. IRA can act as a clearing house for the free flow of publications relating to reading. A library of research studies and reading materials from abroad has already been started. Members can assist by sending pertinent reports.

2. Members of IRA in any country can submit articles for inclusion in the journals. The editors of the Reading Teacher and the Journal of Reading can be encouraged to focus one issue annually on international problems.

3. An International Planning Committee, composed of one representative from each nation having at least ten (or a specified number) of IRA members could convene annually to make recommendations for international activities of the Association.

4. IRA could initiate or cooperate with comparative studies in reading, similar to the six-year, twelve-nation International Study of Achievement in Mathematics, recently reported by Torsten Husén. (12) A similar study in reading is planned to start in 1970 under the direction of Robert Thorndike as part of the International Project for the Evaluation of Educational Assessment.

5. IRA could arrange for a two-way flow of member scholars and classroom teachers, perhaps with affluent councils or a state or regional group to sponsor a counterpart from abroad and to provide professional and social contacts for the visitor.

6. IRA should include on its staff, as soon as practical, a full-time international field representative who can stimulate communication on an international scale.

7. IRA should continue to provide the professional experiences inherent in its educational tours and develop additional opportunities, such as the Britain-to-America tour being planned to coincide with the Sixteenth Annual Convention in Atlantic City in April, 1971.

Conclusion

The need is apparent; the organization stands ready with professional competence and willing members. Only the stimulus and planning are lacking. The future will belong to those who make it; an invitation is extended to all to work together to make the possible a reality.

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