



# Reading Horizons: A Journal of Literacy and Language Arts

---

Volume 6  
Issue 1 *October 1965*

Article 8

---

10-1965

## Reading Horizons vol. 6, no. 1

Follow this and additional works at: [https://scholarworks.wmich.edu/reading\\_horizons](https://scholarworks.wmich.edu/reading_horizons)

 Part of the Education Commons

---

### Recommended Citation

(1965). Reading Horizons vol. 6, no. 1. *Reading Horizons: A Journal of Literacy and Language Arts*, 6 (1). Retrieved from [https://scholarworks.wmich.edu/reading\\_horizons/vol6/iss1/8](https://scholarworks.wmich.edu/reading_horizons/vol6/iss1/8)

This Complete Issue is brought to you for free and open access by the Special Education and Literacy Studies at ScholarWorks at WMU. It has been accepted for inclusion in Reading Horizons: A Journal of Literacy and Language Arts by an authorized editor of ScholarWorks at WMU. For more information, please contact [wmu-scholarworks@wmich.edu](mailto:wmu-scholarworks@wmich.edu).



*Reading*

# HORIZONS



FALL 1965



# *Reading* **HORIZONS**

## Editorial Board

Homer L. J. Carter, Editor

Dorothy J. McGinnis, Associate Editor

Louis A. Govatos

Robert G. Rubom

Virginia J. Phillips

Sara R. Swickard

Helen F. Wise

---

Vol. 6

Number 1

Published quarterly by the Psycho-Educational Clinic and the Homer L. J. Carter Reading Council of the International Reading Association, Kalamazoo, Michigan — Address all communications to Dorothy J. McGinnis, Director, Psycho-Educational Clinic, Western Michigan University, Kalamazoo, Michigan — Business Manager: Blanche O. Bush — Subscriptions Manager: Dorothy E. Smith. Subscription rate \$3.00 per year.

The content and points of view expressed in this magazine are strictly those of the authors and do not necessarily represent the opinions of the Editorial Board of *Reading Horizons*.

## *Table of Contents*

Editorial Comment—What Are Teachers For? . . .	5
Homer L. J. Carter	
Teaching Reading With i/t/a: A Research Report . . .	6✓
Ruth L. Bosma and Vern L. Farrow	
A Taxonomy of Thinking Skills for Young Readers . . .	20
James A. Wright	
Did You See? . . . . .	26
Dorothy J. McGinnis	
Round Robin . . . . .	27
Dorothy E. Smith	
We Suggest . . . . .	30
Eleanor Buelke	
Ten Second Reviews . . . . .	33
Blanche O. Bush	
1965-1966 Program of the Homer L. J. Carter Reading Council of the International Reading Association . . .	43



## Editorial Comment

### WHAT ARE TEACHERS FOR?

Carl Rogers, an outstanding psychologist and teacher, has said,

"I am only interested in learnings which significantly influence behavior.

I have come to feel that the only learning which significantly influences behavior is self-discovered, self-appropriated learning.

Such self-discovered learning, truth that has been personally appropriated and assimilated in experience, cannot be directly communicated to another."

Dr. Rogers in attempting to get the attention of his readers has made three strong statements related to teaching. Let us ask, what are teachers for? We can then attempt to answer the query.

Students in the classes of a nationally known leader in science report that he stimulates his listeners, informs those who inquire, and guides the activity of those who seek his aid. There are three transitive verbs in this sentence, and each is wholly significant. They are *stimulate*, *inform* and *guide*.

Good teachers stimulate and quicken their students by words and deeds. They incite them to action. They accentuate their successes and mitigate their errors. Students identify themselves with these teachers and unconsciously copy not only their ideas but their personal mannerisms as well. Some teachers cannot be ignored. Eminent teachers set forth provocative questions to which students demand pertinent answers.

Good teachers *then* inform their inquiring students by imparting relevant facts and variant points of view. These teachers have new ideas and new materials which they themselves have created. Indoc-trination and exhortation are not part of their instruction. Neither do they proclaim, "I am Sir Oracle, and when I ope my lips let no dog bark!"

Good teachers guide their students and assure them of success. They have done and can do what they want their students to accomplish. Pupils in their classes become students, and students become disciples. Mastery and creative scholarship are their goals. Good teachers are productive and are builders of ideas. Their guidance and counsel are sought in the community, state and nation. They have much to offer, for their stimulation, information and guidance modify significantly human behavior.

Homer L. J. Carter  
Editor



# TEACHING READING WITH i/t/a: A RESEARCH REPORT

*Ruth L. Bosma and Vern L. Farrow*

## **Introduction**

Perhaps the most radical of recent innovations to explode upon the embattled horizon of the continuing reading controversy is i/t/a, the Initial Teaching Alphabet.

Most previous attempts to devise systems for the simplification of beginning reading instruction have retained the traditional alphabet. By and large such programs have merely employed key sound-symbol pictures, colors, or various plans for the systematic introduction of phonemes or sound families emphasizing the structural consistencies of traditional orthography while postponing consideration of irrational exceptions. All have acknowledged the substantial number of irregularities prevalent in T.O. (traditional orthography) but have seemingly taken the view that there was nothing to be done about it. The beginning reader must learn to cope with the concomitant confusion and the sooner the better.

The assumption has been that the majority of children are able to surmount the confusion and learn to read. Further, the assumption has been that reading failure is not a reflection of the inadequacies of the medium but rather a result of limitations within the child. Volumes have been written attempting to identify the intellectual, physical, social, or emotional anomalies reputed to be present in children who have failed at beginning reading (9).

The developers of i/t/a, Sir James Pitman and his colleagues took a different tack. They were intrigued with the possibility that an important source of beginning reading failure was directly attributable to the traditional orthography or spelling of English (5). It was their belief that traditionally printed English overloads the beginner in three ways:

1. Too many characters. The T.O. beginner has to learn two or more different print characters (capitals and lower case, as well as various type styles) for each letter of the alphabet.
2. Too many whole-word representations resulting from the five or more different sets of characters in conventional print.
3. Too many phonic print-symbols as a result of our traditional alphabet and spelling in which there is a wide variety

of ways of signalling in print the restricted number of phonemes in English (2).

Recognizing reading as essentially a decoding process, Sir James Pitman and his staff set about devising a language code which would overcome the limitations of the traditional alphabet and yet retain sufficient commonality to permit easy transition to traditionally spelled material when the reader had achieved a solid grasp of the reading act. No attempt at spelling reform was envisioned (1). Accordingly, the Initial Teaching Alphabet evolved for beginning reading and is reputed to provide four major advantages over T.O.:

1. Consistent spelling. As a code for spoken English, i/t/a is much more consistent. Each of the phonemes is signalled by a different printed symbol, thus the beginner finds that he can rely on the code and is not led to doubt his rational approach to either reading or writing.

2. Consistency of direction. In traditionally printed English, words are read from left to right; however, in many words, the sound value of letters cannot be determined without violating the left-to-right procedure (e.g. made). In i/t/a the rule is uniformly consistent.

3. Fewer characters to be learned. Lower case characters only are used. Capitalization is represented in i/t/a merely by making a larger lower case shape.

4. Fewer whole-word representations need to be learned. Because only one letter shape is used, each word printed in i/t/a has only one form (4).

Experimentation with the new medium began in Britain in 1961 and to date more than eight thousand children have learned to read with i/t/a (5). Interestingly, not all of the focus has been on beginning readers but has also included rather extensive work with remedial cases ranging in age from seven to eleven years (2).

Following the cautiously optimistic reports from Britain (3), interest in the medium was generated in the United States resulting in an ambitious experiment in the Bethlehem, Pennsylvania Public Schools under the direction of Dr. Albert J. Mazurkiewicz and Dr. Harold J. Tanyzer. The findings of the Bethlehem study, published in the spring of 1965, at the conclusion of its second year, have been strikingly favorable (8). Reports of similar investigations from widely scattered parts of the country have been coming in increasingly and substantially support the British and Bethlehem conclusions (8, 10).

Since a major function of the Campus School at Western Michigan University involves experimentation with innovations in instructional concepts and procedures, the staff recognized the implications of the Initial Teaching Alphabet as well as the need for further research with the medium. The usual questions were raised concerning transition, the effect of i/t/a on later spelling in T.O., the possible value of i/t/a for boys in beginning reading, and the degree to which i/t/a might be a superior medium than the typical basal T.O. approach for first grade children.

**Purpose**

The purpose of the research design which grew out of the ferment of discussion was to test the following three null hypotheses:

1. First grade children will not learn to read more effectively through the medium of i/t/a than they will through similar procedures in which the medium is T.O.
2. First grade children will not learn to read as effectively without the inclusion of writing in the curriculum as those who receive regular instruction in writing as a part of the beginning reading program.
3. First grade boys will not learn to read more effectively through the medium of i/t/a than they will through similar procedures in which the medium is T.O.

It should be explained that the second hypothesis resulted from the feeling that great difficulty with later spelling in T.O. might be experienced from the overlearning of many word configurations unique to i/t/a. It was felt that writing i/t/a would produce excessive reinforcement of the mental images of such word forms, and would thus contribute in a major way to later spelling problems. Research and application in connection with kinesthetic-tactile procedures by such educators as Fernald (7) seemed to support the contention. Accordingly, it was decided to eliminate writing completely from the experimental instructional program until children began to use words spelled in T.O. It should be appreciated that the deletion of writing from the experimental i/t/a program while allowing writing instruction to remain in the control procedures marked this study as unique among i/t/a research projects, and also posed a severe and unconventional test of the effectiveness of the i/t/a medium.

**Procedures**

To test the hypotheses stated above, the first grade class of the Western Michigan University Campus School was selected to be the

experimental population. This group was comprised of twenty-two subjects, eleven boys and eleven girls.

Two first grade classes in a Kalamazoo Public School provided a total population of forty-nine subjects from which twenty-two were ultimately matched with the experimental subjects to serve as a control group.

The Campus School and Public School groups were administered the Metropolitan Reading Readiness Test and the Lorge-Thorndike Intelligence Test in September, 1964, and were then equated with reference to sex; C.A.; Metropolitan Reading Readiness Test score; and I.Q. Although no attempt was made to match the groups with respect to socio-economic status, the public school from which the controls were obtained was chosen because of the similarity of community composition with that of the Campus School population.

Table I shows the characteristics of the experimental and control groups and indicates that the matching was such that there were no significant differences between the group means of the criteria employed.

TABLE I

Comparison of Experimental and Control Groups with Respect to Chronological Age, Reading Readiness Scores, and Intelligence, September, 1964.

	Experimental i/t/a Group (N=22)		Control t. o. Group (N=22)		DM . t	
	M	SD	M	SD		
C.A. (Months)	84.3	2.77	85	3.67	.7	.714 (NS)
Reading Readiness <sup>1</sup>	60.7	5.80	59.3	4.85	1.4	.864 (NS)
I.Q. <sup>2</sup>	114.5	12.3	114.9	11.72	.4	.110 (NS)

1. Metropolitan Reading Readiness Test

2. Lorge-Thorndike Intelligence Test

NS Not significant

Although the subjects comprising the control group were distributed between two first grade classrooms, the teachers responsible for reading instruction were judged to be comparable to each other and to the Campus School teacher in qualification, experience, and professional reputation.

None of the subjects in the experimental group entered first grade with any formal reading skill. They began immediately in September, 1964, undergoing the i/t/a beginning reading program recommended

by the publishers of the materials with one major alteration. As explained earlier, those portions of the i/t/a reading program involving writing were deleted. However, extensive provisions were made for language development through conversation, discussion, listening activities, dramatic play, experience stories recorded by the teacher, and oral reading. In addition to supplementary oral language experiences a continuous art program specifically designed to prepare the children for writing was undertaken. Stick drawings involving vertical, horizontal, and diagonal lines, as well as circles and arcs, were stressed in these art activities.

Subjects in the control group were not aware of their selection and they were not identified to the teachers. The controls were not segregated from their respective classes and they underwent the typical beginning reading program recommended by a major publisher of basal reading texts. The remainder of the first grade academic work of the control subjects was likewise unaltered and included the usual correlation of writing with the reading instruction.

In May, 1965, at the close of the school year, Metropolitan Achievement Tests, Form B/Primary I Battery were administered to both experimental and control groups to provide a post-instruction evaluation. It should be noted that although these tests are published in T.O., the experimental i/t/a group took them without assistance in strict accordance with the standardized instructions for administration.

The results of the post-instruction testing are discussed in the following section.

#### **Analysis of the Data**

The statistical procedures employed in the analysis of the data in the study consisted of computing means and standard deviations for the matching criteria and for the grade equivalents obtained by the experimental and control groups on the Metropolitan Achievement Tests. The differences between these means were then subjected to the t test to determine statistical significance. Differences were judged to be statistically significant if they reached the .05 level of confidence. A further analysis was then made of the performance on each of the individual sub-tests: Word Knowledge, Word Discrimination, and Reading to determine the frequency and percent of subjects in the experimental and control groups achieving various grade equivalents.

Table II shows a comparison of post-instruction achievement of the experimental and control groups with respect to mean grade equivalents and standard deviations on the three sub-tests.

TABLE II

Comparison of Post-Instruction Achievement of Experimental and Control Groups Measured by the Metropolitan Achievement Tests, May, 1965.

	Experimental i/t/a Group (N=22)		Control t. o. Group (N=22)		DM	t
	M	SD	M	SD		
	(Grade Equiv.)		(Grade Equiv.)			
Word Knowledge	2.82	.42	2.25	.39	.57	4.67 (*)
Word Discrimination	2.99	.45	2.62	.64	.37	2.21 (***)
Reading	3.15	.40	2.65	.85	.50	2.50 (**)

\* Significant at .01 level

\*\* Significant at .02 level

\*\*\* Significant at .05 level

It will be noted that the mean performance of the experimental group on each of the sub-tests significantly exceeded (.05 or above) that of the control group. Further, reference to the standard deviation for each group indicates that performance of the experimental group was much more closely clustered and generally narrower in range than that of the control group, suggesting not only more efficient but more homogeneous achievement.

In view of the foregoing data, null hypothesis 1, that first grade children will not learn to read more effectively through the medium of i/t/a than they will through similar procedures in which the medium is T.O. was rejected. Likewise, null hypothesis 2, that first grade children will not learn to read as effectively without the inclusion of writing in the curriculum as those who receive regular instruction in writing as a part of the beginning reading program was rejected.

Table III shows the frequency distribution of grade equivalents on the Word Knowledge sub-test obtained by the experimental and control groups.

TABLE III

Distribution of Metropolitan Achievement Word Knowledge Sub-Test Grade Equivalents by Experimental and Control Groups, May, 1965.

Grade Equiv.	Experimental i/t/a Group (N=22)			Control t. o. Group (N=22)		
	Freq.	%	Cumulative %	Freq.	%	Cumulative %
3.8-4.0						
3.6-3.8						
3.4-3.6						
3.2-3.4	8	36.36	36.36	1	4.55	4.55
3.0-3.2						
2.8-3.0	4	18.18	54.55	2	9.09	13.64
2.6-2.8	6	27.27	81.82	3	13.64	27.27
2.4-2.6	2	9.09	90.91	6	27.27	54.54
2.2-2.4				2	9.09	63.64
2.0-2.2	1	4.55	95.45			
1.8-2.0	1	4.55	100.00	6	27.27	90.91
1.6-1.8				1	4.55	95.45
1.4-1.6				1	4.55	100.00

Reference to the cumulative per cent column indicates that 95.45% of the experimental group scored at the second grade level or above, while only 63.64% of the control achieved comparable levels. Of equal interest is the fact that only 4.55% of the experimental group achieved less than second grade level (none below 1.8) while 36.37% of the control group failed to reach second grade equivalent (9.10% below 1.8). These data would suggest that the i/t/a program produced significantly superior results with the lower end of the ability spectrum. Referring to the upper end of the performance range it will be seen that 36.36% of the experimental group achieved a grade equivalent of 3.2 or above, while only 4.55% of the control group matched this performance, suggesting that the i/t/a program was also eminently beneficial for the able pupil.

Table IV shows the frequency distribution of grade equivalents on the Word Discrimination sub-test obtained by the experimental and control groups.

TABLE IV

Distribution of Metropolitan Achievement Word Discrimination Sub-Test Grade Equivalents by Experimental and Control Groups, May, 1965.

Grade Equiv.	Experimental i/t/a Group (N=22)			Control t. o. Group (N=22)		
	Freq.	%	Cumulative %	Freq.	%	Cumulative %
3.8-4.0						
3.6-3.8	7	31.82	31.82	4	18.18	18.18
3.4-3.6						
3.2-3.4						
3.0-3.2	4	18.18	50.00	3	13.64	31.82
2.8-3.0	1	4.55	54.55	4	18.18	50.00
2.6-2.8	4	18.18	72.73			
2.4-2.6	6	27.27	100.00	3	13.64	63.64
2.2-2.4						
2.0-2.2				3	13.64	77.27
1.8-2.0				4	18.18	95.45
1.6-1.8						
1.4-1.6				1	4.55	100.00

Reference to the cumulative per cent column indicates 100% of the experimental population achieved grade equivalents of 2.4 or above, while only 63.64% of the control group obtained such scores. This suggests that there was no detrimental effect in regard to either aural or visual discrimination of words as a result of exposure to i/t/a word configurations. Further, it should be noted that 31.82% of the experimental group achieved grade equivalents of 3.6 or above, while only 18.18% of the controls reached a similar level, suggesting again that both ends of the ability range were accelerated by the i/t/a program.

Table V shows the frequency distribution of grade equivalents on the Reading sub-test obtained by the experimental and control groups.



TABLE V

Distribution of Metropolitan Achievement Reading Sub-Test Grade Equivalents by Experimental and Control Groups, May, 1965.

Grade Equiv.	Experimental i/t/a Group (N=22)			Control t. o. Group (N=22)		
	Freq.	%	Cumulative %	Freq.	%	Cumulative %
3.8-4.0	3	13.64	13.64	3	13.64	13.64
3.6-3.8	4	18.18	31.82	2	9.09	22.73
3.4-3.6	6	27.27	59.09	1	4.55	27.27
3.2-3.4				1	4.55	31.82
3.0-3.2	2	9.09	68.18	1	4.55	36.36
2.8-3.0	1	4.55	72.73	3	13.64	50.00
2.6-2.8	1	4.55	77.27	1	4.55	54.55
2.4-2.6	1	4.55	81.82			
2.2-2.4	2	9.09	90.91	1	4.55	59.09
2.0-2.2				2	9.09	68.18
1.8-2.0	2	9.09	100.00	4	18.18	86.36
1.6-1.8				2	9.09	95.45
1.4-1.6				1	4.55	100.00

Reference to the cumulative per cent column indicates that 90.91% of the experimental group reached a reading grade equivalent of 2.0 or above, while 68.18% of the controls obtained such levels. Perhaps more significant is the fact that only 9.09% of the experimental group reached less than second grade level (none below 1.8) while 31.82% of the control group fell below grade equivalent 2.0 with 19.64% achieving 1.6 or less. These data suggest that the i/t/a program was better able to develop the total reading performance of the lower end of the ability spectrum than was the T.O. program. While performance of the two groups at the highest end of the scale was comparable, it is noteworthy that 68.18% of the experimental group reached a reading grade equivalent of 3.0 or above, while only 36.36% of the control group matched this performance, suggesting that superior achievement was more consistent among the experimental subjects.

Table VI shows a comparison of post-instruction achievement of boys in the experimental and control groups with respect to the mean grade equivalents and standard deviations on the three sub-tests.

TABLE VI

Comparison of Post-Instruction Achievement of Boys in Experimental and Control Groups Measured by the Metropolitan Achievement Tests, May, 1965.

	Experimental i/t/a Group (N=11)		Control t. o. Group (N=11)		DM	t
	M	SD	M	SD		
	(Grade Equiv.)		(Grade Equiv.)			
Word Knowledge	2.76	.35	2.15	.45	.61	3.59 (*)
Word Discrimination	2.84	.39	2.55	.62	.29	1.31 (NS)
Reading	3.03	.60	2.35	.73	.68	2.39 (***)

\*\*\* Significant at .05 level

\* Significant at .01 level

NS Not significant

These data reveal that the performance of boys in the experimental group on the Word Knowledge sub-test exceeded significantly (.01 level) that of their counterparts in the control group. This may be explained in large measure by the broader vocabulary experiences provided by the i/t/a program. While the mean grade equivalent on the Word Discrimination sub-test was greater for the experimental boys it did not reach statistical significance in accordance with the criteria of this study. Interpretation of this performance should be tempered by the fact that the experimental subjects having been exposed only to i/t/a word configurations all year had just recently transitioned to T.O. and took the Metropolitan Achievement Tests written in T.O. Thus it may be justifiably assumed that their performance with T.O. word configurations might be expected to show a less than significant advantage over the control subjects. Comparison of mean grade equivalents on the Reading sub-test again favored the boys in the experimental group to a significant degree (.05 level), suggesting that instruction with the i/t/a medium was relatively more beneficial for boys in this study. Standard deviations for the experimental group of boys on all three sub-tests were more closely clustered and narrower in range suggesting greater homogeneity of achievement. On the basis of the foregoing data, null hypothesis 3, that first grade boys will not learn to read more effectively through the medium of i/t/a than they will through similar procedures in which the medium is T.O. was rejected.

Table VII shows a comparison of post-instruction achievement of girls in the experimental and control groups with respect to the mean grade equivalents and standard deviations on the three sub-tests.

TABLE VII

Comparison of Post-Instruction Achievement of Girls in Experimental and Control Groups Measured by the Metropolitan Achievement Tests, May, 1965.

	Experimental i/t/a Group (N=11)		Control t. o. Group (N=11)		DM	t
	M	SD	M	SD		
	(Grade Equiv.)		(Grade Equiv.)			
Word Knowledge	2.89	.42	2.45	.41	.44	2.50 (***)
Word Discrimination	3.14	.45	2.69	.64	.45	1.91 (NS)
Reading	3.27	.63	2.95	.84	.32	1.01 (NS)

\*\*\* Significant at .05 level

NS Not significant

While the mean grade equivalent of the experimental girls on the Word Knowledge sub-test was significantly higher (.05 level), differences in performance on the Word Discrimination and Reading sub-tests were not statistically significant as defined by the criteria of this study. Perhaps as was suggested in the case of the experimental boys, the broader vocabulary experiences provided through the i/t/a materials may account for this similar advantage in word knowledge on the part of girls in the experimental group. Although standard deviations favored the experimental girls, these differences between the groups in terms of cluster and range were not as great as was the case with the boys. Analysis of these comparative data suggests that instruction with the i/t/a medium was slightly more beneficial than basal instruction in T.O. for girls in this study; however, the advantage was less marked than for boys.

Table VIII shows a post-instruction comparison of achievement of boys and girls in the experimental group with respect to the mean grade equivalents and standard deviations on the three sub-tests. Table IX provides similar data with respect to boys and girls in the control group.

TABLE VIII

Comparison of Post-Instruction Achievement of Boys and Girls in Experimental Group Measured by the Metropolitan Achievement Tests, May, 1965.

	Boys (N=11)		Girls (N=11)		DM	t
	M	SD	M	SD		
	(Grade Equiv.)		(Grade Equiv.)			
Word Knowledge	2.76	.35	2.89	.42	.13	.792 (NS)

Word Discrimination	2.84	.39	3.14	.45	.30	1.68 (NS)
Reading	3.03	.60	3.27	.63	.24	.920 (NS)

NS Not significant

TABLE IX

Comparison of Post-Instruction Achievement of Boys and Girls in Control Group Measured by the Metropolitan Achievement Tests, May, 1965.

	Boys (N=11)		Girls (N=11)		DM	t
	M	SD	M	SD		
	(Grade Equiv.)		(Grade Equiv.)			
Word Knowledge	2.15	.45	2.45	.41	.30	1.65 (NS)
Word Discrimination	2.55	.62	2.69	.64	.14	.522 (NS)
Reading	2.35	.73	2.95	.84	.60	1.79 (NS)

NS Not significant

In neither case were differences in mean grade equivalents statistically significant, although the performance of girls in both the experimental and control groups exceeded those of the boys. Standard deviations for boys and girls in each case were rather closely comparable. These data indicate that girls achieved slightly better scores in the three sub-tests than did the boys in their respective groups regardless of the medium employed in teaching beginning reading. Such a finding might have been anticipated in view of the typically more advanced development of girls at the first grade level.

### Conclusions

✓ Within the limitations of the research design and with respect to the sample population, the following conclusions were judged to be warranted:

1. First grade children taught to read with the i/t/a medium achieve reading skills significantly superior to those of children taught by typical basal T.O. materials.

2. First grade children taught to read with the i/t/a medium, but without the benefit of writing experiences achieve reading skills significantly superior to those of children taught by typical basal T.O. materials and procedures including systematic writing instruction.

3. First grade boys learn to read more readily and effectively with i/t/a than with typical basal T.O. materials.

4. Transition from i/t/a to T.O. materials does not pose a significant problem for first grade children.

5. Beginning reading instruction employing i/t/a symbols and phonemic spelling does not impair discrimination of word configurations in T.O.

6. Beginning reading instruction employing i/t/a materials provides first grade children with a more extensive and enriched vocabulary.

#### **Recommendations for Further Study**

Research in education suffers from a variety of limitations, as does research in the behavioral sciences. These limitations are imposed by the very nature of the subjects studied. Human learning is not yet fully understood and the ramifications of myriad personality, social, hereditary, and environmental characteristics serve to complicate the researchers' efforts.

In the study reported above, many gaps bearing upon interpretation are acknowledged. For example, the extent to which the Hawthorne Effect contributed to the ultimate findings remains unknown. Further, no adequate instrument is yet available for determining accurately the influence of parental model and aspiration on a child's beginning reading achievement. Of equal importance is the question of the effect upon the performance of the individual child of imagined or real pressures imposed by teacher, peers, and siblings with respect to his willingness to expose himself to the competition inherent in the beginning reading experience. Lack of knowledge in these and other areas continues to generate doubt concerning the findings of research in reading.

With specific reference to the efficacy of i/t/a as a medium for teaching beginning reading, more controlled studies are needed comparing i/t/a with various other approaches, sampling large populations of differing characteristics throughout the country. And, most certainly longitudinal studies to determine the performance and reading needs of i/t/a taught pupils through the elementary grades are imperative.

Although reports concerning i/t/a to date have been consistently favorable, some American educators feel that we are far from possessing a body of valid research evidence from which decisions regarding major innovations in reading curricula may justifiably be made (6). There is continuing need for researchers and teachers to focus so-

phisticated, well designed experimentation upon the pressing questions suggested above.

#### References

1. Downing, J. A. "Current Misconceptions About i/t/a." *Elementary English*, XXXII (May, 1965), 492-501.
2. Downing, J. A. "The Augmented Roman Alphabet for Learning to Read." *The Reading Teacher*, XVI (March, 1963), 325-336.
3. Downing, J. A. *The Initial Teaching Alphabet*. New York: Macmillan, 1964.
4. Downing, J. A. "The i/t/a (Initial Teaching Alphabet) Reading Experiment." *The Reading Teacher*, XVIII (November, 1964), 105-110.
5. Downing, J. A. "Teaching Reading with i/t/a in Britain." *Phi Delta Kappan*, XLV (April, 1964), 322-329.
6. Downing, J. A. and Cutts, W. G. "The Value of i/t/a: Opinions Differ." *NEA Journal*, LIII (September, 1964), 20-22.
7. Fernald, G. M. *Remedial Techniques in Basic School Subjects*. New York: McGraw-Hill Book Company, Inc., 1943.
8. Mazurkiewicz, A. J. "Bethlehem Test Results: April 1, 1965." *i/t/a Bulletin*, II (Summer, 1965), 1-2.
9. Robinson, H. M. *Why Pupils Fail in Reading*. Chicago, Ill.: University of Chicago Press, 1946.
10. *U. S. News and World Report*. "When a New Alphabet Was Tested for a Year." LIX (July 26, 1965), 16.

---

Ruth Bosma is an Assistant Professor of Education and First Grade Supervisor at Western Michigan University Campus School. She took her Bachelor and Masters Degrees at Western and has taught in both elementary and secondary public schools.

Vern Farrow was formerly an Assistant Professor of Education at Western Michigan University and is currently on the staff of the School of Education at the University of Oregon. He specializes in Elementary Education with emphasis in Reading, Language Arts, and the Social Studies. Prior to taking the Doctorate at the University of Oregon, Dr. Farrow taught in both elementary and junior high schools in Seattle, Washington.

# A TAXONOMY OF THINKING SKILLS FOR YOUNG READERS

*James A. Wright*

There is nothing more futile than the attempt to accomplish a task when one has not yet decided what the task is. Likewise, there is nothing more difficult than a teacher's attempt to teach a set of skills when the teacher has not yet decided what the skills are. A facile reader himself, a teacher might not have analyzed the reading processes in which his mind engages. Yet he must have a clear understanding of these thinking skills if he is to instill them in his students.

This understanding cannot be gained from the basal reader guidebooks or accompanying workbooks. As Niles<sup>1</sup> has so clearly pointed out, these texts and workbooks tend to fragmentize the skills and confuse both teachers and students by presenting too many *different* skills to teach and learn. The authors have further compounded the confusion by developing their own lexicons, disregarding standard definitions and at times contradicting their own. For example, drawing conclusions, inferring, and evaluating the facts or determining the reasoning are considered three different skills by one author. The question "Could this story have happened?" is offered to provide exercise in drawing conclusions, while the question "Could this be a true story?" is prescribed to exercise evaluating the facts or the reasoning. The question "Do you think ..... caused .....?" is given as practice in inferring. "Do you think ..... gave a good reason for what he did?" is proposed to contribute to the development of the skill evaluating the facts or the reasoning.

One series of guidebooks considers perceiving relationships and strengthening "memory" based on logical relationships as two separate skills, with different pages assigned to each in the index of skills. In addition to separate references in the index for drawing conclusions, forming judgments and opinions, and making inferences, one series adds "Using evidence to make judgments and to support opinions" under a separate subheading.

The idea that the thinking we wish a young student to practice is so complicated as to require a teacher's guidebook of more than five hundred pages for each basal reader is appalling. The writer

---

1. Olive S. Niles, "Comprehension Skills," *The Reading Teacher*, September 1963.

believes, along with Niles,<sup>2</sup> that the number of thinking skills to be taught could be reduced if teachers could gain a clear awareness of what is essential.

Some careful investigations have been made of the interpretive process in reading, dating back at least to 1917, when Thorndike<sup>3</sup> published his classical study of the ways children misinterpret what they read. He attributed their errors to the overpotency of certain words. He concluded, "The mind is assailed as it were by every word in the paragraph. It must select, repress, soften, emphasize, correlate, and organize, all under the influence of the right mental set or purpose or demand." He condemned the "fishing around in the text" for details to use in answering a question and "its use without reorganization" found in the practice exercises of that era. Yet this same perverted form of reasoning is the basis for much of the contrived exercises still found in practice material today.

Most of the writing in the field of reading has had to do with translating or associating printed words with their sounds and meanings. Though the ability to recognize the sound and meaning of the printed symbol is basic to the reading process, it is only the initial step toward understanding an author's attempt to communicate his unique contribution to society. It is at the level of thinking identified by Thorndike, however, that our knowledge is slight and our needs are great.

A reader is unable to "select, repress, soften, emphasize, correlate and organize" the ideas which assail him in print until he has established a "purpose or demand." No assigned reading is logical which has not an assigned purpose. Only those students who read with a purpose can employ the thinking exercised by an efficient reader. Other students are simply engaged in obedient purposelessness.

Once a specific purpose is set and the translating has been done, the reader may proceed to calculate what is relevant and what is irrelevant to his purpose. Only then is he able to accentuate the important ideas and eliminate the unimportant as he reads along. The young reader's ability to eliminate the unimportant stands him in good stead when he is assailed by the abundance of "fake dialogue" found in many school texts. Much other data irrelevant to his particular purpose must also be slighted as he exercises his thinking skills.

---

2. *Ibid*

3. Edward L. Thorndike, "Reading as Reasoning: A Study of Mistakes in Paragraph Reading," *Journal of Educational Psychology*, VIII, June 1917.



A reader must calculate the relationships among the thoughts presented. Accurate comprehension of a single sentence depends on his grasping the particular kinds of relationships among the ideas, for recognition of syntax requires this same ability. For example, the young reader unaware of the relationships indicated by the "signal" words *but* and *nor* in the sentence "But the natives do not mind the heat, nor do they seem to mind the stinging insects" has missed the gist.

Students should be assigned practice in recognizing signal words and identifying the kind of idea introduced by each one.

Examples:

*Another fact*—next, then, further, besides, second, moreover, and, also, in addition, another, finally, nor, etc.

*An opposite idea*—but, still, yet, however, although, nevertheless.

*Another time*—then, soon, meanwhile, later, at last, finally, suddenly, recently, before long.

*Another place*—there, here, above, beneath, on the other side, yonder, ahead, behind.

*A cause*—because, since, when, if, due to, as, in order to, so that, as a result of, on account of.

*An effect*—therefore, so, consequently, hence, as a result, as a consequence, eventually.

*A comparison*—before . . . after, some . . . others, then . . . now, once . . . today, but, while, than, like, as.

Once the reader calculates the relationships among the ideas, he no longer feels he has been assailed by jumbled and isolated facts. Instead, he is able to reorganize the data in his mind and correlate the supporting details with the related main ideas. Perceived in this organized form the ideas are more easily understood, more efficiently recalled, and more accurately applied in further interpretation.

An awareness of the author's organizational pattern affects the reader's thinking as he correlates the facts read and the purpose assigned. Through a recognition of the overpotency of certain words, the structure, or pattern, employed by the author is made clear. In a series of books edited by this writer, Gainsburg<sup>4</sup> describes the four basic patterns used by writers. He advises the student to become familiar with the key words used in conjunction with the respective

---

4. Joseph C. Gainsburg, *Advanced Skills in Reading*, Books 1, 2, and 3. New York: Macmillan, 1963.

patterns. For practice, the young reader should calculate which is the key sentence, accentuate the key word or words, and decide whether the other sentences add examples, details in time order, causes, effects, comparisons, or contrasts.

Examples of key words:

*Examples*—some, many, several, numerous, various, kinds, types, ways, examples, other, variety, endless.

*Details in time order*—history, stages, steps, changes, events, process, story, development, method.

*Cause-effect*—reasons, causes, because, since, why, how, consequences, results, effects, so, so that.

*Comparison-contrast*—like, similar, same, alike, while, but, although, though, better, different, before . . . after, then . . . now, here . . . there.

✧ Finding the main idea and not mistaking a detail for the main point is incidental when the reader has accentuated the key words, calculated the basic pattern used by the author, and correlated the supporting details. Classifying, outlining, and summarizing are further corollaries of this same clear thinking. The reorganizing referred to by Thorndike is also contingent upon this ability.

Through reorganizing what he reads, the reader may formulate a special kind of summary. He may arrive at a generalization. However, generalizations require an accurate appraisal, or evaluation, of the material being read. The young reader should be provoked to think, "What kind of person was .....?" or, "What did I learn from this selection that can help me understand others?" The older pupil should practice thinking, "What general conclusion can I draw from this selection, and what evidence can I find to support this conclusion?"

The new approach to the teaching of social studies emphasizes this same technique of "discovery." Discovery is inductive reasoning, or "reasoning from particular facts or individual cases to a general conclusion." According to some authorities, these inductions are inferences.

The ability to evaluate the main points and significant details leads naturally to skill in drawing various inferences which provide the reader richer meaning as well as greater interest. Only through these inferences can characters and scenes come to life. The young reader must practice inferring the author's purpose or viewpoint, the details or events omitted, and the moods, motives and character

traits implied. His appreciation is further enhanced when he makes associations, forms sensory images, and makes comparisons. He must read aggressively, always anticipating what the author is going to say next.

The young reader must also make judgments. He must judge whether the ending was a surprise—whether he missed any of the hints along the way that a good writer gives and a good reader recognizes—whether the ending is satisfying: true to the characters and events in the selection, and true to life—whether the author's purpose is to present fantasy, thrilling adventure, humorous incidents, humorous characters, life in a particular place at a particular time, a study of a particular character, a great truth or theme, propaganda, or a satire—whether the author succeeded in carrying out his purpose—whether the author made most use of plot, characters, or setting in carrying out his purpose—and whether the selection is suitable to the maturity of the young reader himself.

When reading nonfiction the young reader must think about whether the facts are relevant to the theme or topic—whether the statements are facts or opinions—whether the facts can be verified—whether the author is qualified—whether relevant facts have been suppressed—and whether the reader must revise some of his own prior assumptions in the light of what he has just read.

During ordinary reading, these thinking skills are not used in isolation. They are used in varied combinations. However, for the purpose of description or practice in the improvement of a skill, isolation is necessary. Also, the function of each skill as it relates to the major purposes for reading is better understood in the light of this taxonomy which has its origin in Thorndike's research of 1917.

A teacher who does not have a fairly clear awareness of the thinking skills required of an efficient reader must resort to contrived reading selections and contrived reading exercises which develop thinking of the shallowest kind. A knowledge of the intricate process of appreciating an author's composition of ideas is a decisive tool in the hands of a teacher. Possessing this insight, a teacher is able to assign any and all reading matter as a vehicle through which a particular skill may be learned or reviewed.

Teaching the student the thinking skills is accomplished by posing guiding questions, having the student read to find the answers, and then discussing the student's responses with him. If the questions posed are thought-provoking and stimulating, the student will grow in his ability to think about what he reads. If the questions are limited

to facts and small details, thinking and appreciation will be shallow. Under the latter type of guidance a student will GO through his reading text. Under the former type a student will GROW through his reading text. He will become aware of the different literary styles and eventually adopt a discriminating taste, based on a reasonable evaluation of available literature.

Over a period of time the teacher should transfer the responsibility for posing questions onto the pupil himself. While he may need help at first to formulate these questions orally or in written form, he should be encouraged gradually to “think” the questions to himself. With enough practice, he should develop an aggressive, inquiring, purposeful attitude which prompts him automatically to translate, calculate, accentuate, eliminate, correlate, and evaluate those ideas he meets in print.

---

James A. Wright is principal of the Myers Elementary School in Grand Blanc, Michigan. He is President-elect of the Flint Chapter of the International Reading Association.

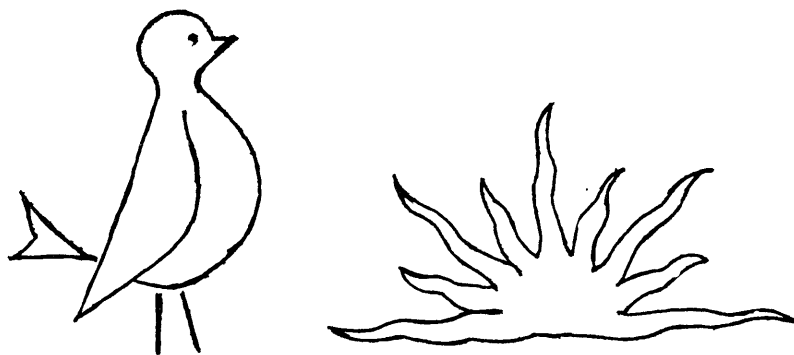
# DID YOU SEE?

*Dorothy J. McGinnis*

*Teaching Reading in High School* by Robert Karlin? This book was designed for high school teachers interested in providing reading instruction in their classrooms. Karlin emphasizes the need for the teaching of developmental reading at the secondary level, and he supports his point of view with statistics resulting from a survey taken in the New York public high schools in 1955. According to this survey approximately forty percent of the students evaluated were found to be reading at least a year below their reading expectancies. Basic reading skills, such as word recognition, reading comprehension, rate, study skills and literary appreciation, are discussed. Specific examples of reading lessons are detailed. Secondary teachers should find this book to be a useful guide.

*The Responses of Adolescents While Reading Four Short Stories?* This study by James R. Squire published by the National Council of Teachers of English reports the responses of ninth and tenth grade students while reading four short stories. The author draws certain implications from the responses regarding the teaching of literature. English teachers concerned with the improvement of reading should find this publication of real value.

*Reading Instruction in Secondary Schools?* This is the second in a series of publications under the general title of "Perspectives in Reading" published by the International Reading Association. It is a 149 page volume consisting of a collection of ten papers which offer useful approaches for the specialized reading teacher and for the subject-matter teacher. The procedure followed in preparing this book is noteworthy. A committee of leaders in the area of reading selected ten significant topics and invited "outstanding specialists" to write papers on these topics, one topic to each specialist in terms of his or her special interests and qualifications. These papers were then presented at a small conference in Chicago where highly qualified discussants supplemented each paper with their own opinions. The book contains both the papers and the important points made by the discussants. Such an approach makes interesting reading. Don't miss it.



## ROUND ROBIN

*Dorothy E. Smith, Editor*

The expert reader is also a master hand at recognizing the various components of a sentence. This ability is a vital factor in his expertness. Since this is true, should not students be given training in this aspect of reading? Read what Louis Foley, an English teacher and the author of many scholarly articles, has to say on the subject.

Dear Editor:

Recently a college professor was quoted in a newspaper as saying that "meaningless diagraming of sentences" should be eliminated from school curricula. In my opinion this suggestion is not grounded in wisdom.

The question is of course begged at the start by calling such activity "meaningless." No doubt it can be so for people who do not give it much thought. There are those of us, however, who view diagraming sentences as at least *one* rather effective device to help students become more clearly aware of how our speech-patterns hold together to make sense.

When I was a boy in grade-school, we did a good deal of diagraming. One teacher whom I remember particularly was extremely expert at it and enthusiastic about it. The class as a whole found it as interesting and enjoyable as any kind of exercise we ever had in the classroom. I think we would have cheerfully challenged anyone to come up with a sentence—no matter how complicated, if correct and well constructed—that we could not dispose of completely according to the system. It is my conviction that that experience gave us something valuable and probably as durable as any of the things that one can learn in school. The overwhelming majority of my classmates never

entered high school, let alone college, but I believe most of them realized things about sentence-structure that too many people who have missed such training never do thoroughly understand.

Recently I tried a little experiment in a college class in composition. With no leading questions, no hint as to what sort of answer was expected, I asked them to write an explanation of how they had learned what they knew about grammar and sentence-structure. A clear majority testified that they had especially profited from diagramming. A typical comment was:

“Learning grammar can be fun . . . if one learns it the way I did, . . . by sentence diagramming. The diagramming of sentences is not only interesting, but is very helpful in teaching one grammar.”

Looking back upon their earlier instruction through a perspective of four or more years, these college students, well prepared for higher education, certainly do not consider “meaningless” the training they had in diagramming sentences.

To be sure, this teaching device has its limitations. There are various phenomena, not without importance in the construction of sentences, which it is hardly capable of showing realistically. For instance, an adverbial element which would be formally disposed of as “modifying the verb” may actually apply rather to the entire predicate or to the sentence as a whole. A so-called final or dangling “preposition” may really be part of what amounts to a compound verb, representing a unified idea. So far as the thought is concerned, often an adjective modifies a noun not directly but as it is already modified by one or more other adjectives. These are merely examples of sorts of things which diagramming is not sufficiently flexible to handle with finality. Nevertheless it can bring out graphically the basic patterns which one needs to see clearly first of all. As a relatively modern expedient, it replaced the old-fashioned exercise of “parsing,” something which could not be performed intelligently without already understanding the plan of the sentence as a whole. By making this plan clearly graphic, diagramming rendered parsing very easy and in fact unnecessary because it was unequivocally implied in the form of the diagram.

The late Sir Winston Churchill has left eloquent testimony of his indebtedness to a Mr. Somervell who taught him English. “He taught it as no one else ever taught it. Not only did we learn English parsing thoroughly, but we also continually practiced English analysis.”

This method of “analysis” was just another way of working for the grasp of structure which is the aim of diagraming. “He took a fairly long sentence and broke it up into its components by means of black, red, blue, and green inks. Subject, verb, object, relative clauses, conditional clauses, conjunctive and disjunctive clauses—each had its color and its bracket. It was a kind of drill. We did it almost daily.” There was no doubt in Sir Winston’s mind that that was how he “got into his bones the essential structure” of ordinary sentences, and this he considered “a noble thing.” Such, then, was the value of a training which amounted to “diagraming,” in the view of one of the greatest masters of English of all time.

We might add that as a realistic and far-sighted statesman he was no despiser of “tradition.” He would, we may well believe, have subscribed to the anonymous aphorism: “A people without tradition are like the mule; they have no pride of ancestry and no hope of progeny.”

Sincerely,  
Louis Foley



# WE SUGGEST

*Eleanor Buelke*

Jennings, Frank G.,  
*This Is Reading.*

N. Y.: Bureau of Publications,  
Teachers College, Columbia University,  
1965, Pp. xv + 196.

Many present-day books about reading and reading instruction deal with these subjects largely as processes apart from their human aspects. They treat reading as a physical function; or, as a form of sequential, mechanical, stimulus-response learning; or, perhaps, as an imperative outcome of our national historical, economic, and social development. In *This Is Reading* Frank Jennings expresses his convictions and opinions in ways that keep the individual and his unique, personal, human qualities in clear, central focus.

The sincerity of this new book demands sincere readers. From teachers it asks concern for value of children, aspirations to professional stature, and art in human relations. It expects talent to transmit one's own thirst for delight and appetite for wonder to children, love of one's subject, and operational understanding of basic educational principles. From parents and lay readers it calls for a recognition of the great importance of reading to any kind of learning, an understanding of the vital significance of language development in any, and all, stages of growth, and encouragement of youth as it struggles to master and to improve management of ideas in its world.

In a sense, this is what Mr. Jennings believes reading is—the management of signs of things in the world about us, and of the signs of things represented. He generalizes that the history of reading habits is the history of society and its pressures upon people in it. He suggests that the history of reading instruction is the history of man's interpretations of signs, and representations of signs, in the world about him. It is also growth in complication, extension, and sophistication of methods of managing these signs.

As signs involving feelings are translated into action, reading gains precision. As signs involving faces, features, and figures are organized into personalities, reading gains in scope. As signs involving observations of nature are interpreted accurately, reading begins to encompass the universe. For man to become a healthy human being in a present-day free society he needs skills to manage the signs of his world. He must be able to see these signs, to reflect upon them, to hold ideas still long enough to compare them, and to choose wisely from them for his own use.

To Jennings, certain attributes of man have been considered contributing factors to his unique, human character. One of these is his language. His world of words is one place man can look for signs. Words enable man to portage meanings of events from one place to another for examination. Words enhance human companionship. Words hurt, too. Words cause destructive action. Words confuse. Young school children who have had happy language experiences bring respect for words, and joy in their management, to the classroom.

Because words can be so important to learners, teachers need to recognize the differences between words: the sham and the real; the ambiguous and the precise; the stultifying and the stimulating; the shoddy and the excellent. Such recognition helps to hold the bright magic of words untarnished, to keep the black magic of words inoperative, and to prevent "associated diseases of words and word users."

Protection from what Mr. Jennings calls the "slippery word" can be taught, or learned, only through expert instruction in meaningful thinking. This protection should begin at birth, ought to be initiated by parents, and needs to be continued through childhood and adulthood by the community, school, church, and society itself. To introduce and promote ideation, to maintain the romance and adventure of concept formation, become the responsibilities of all the adult and the mature to the young and the immature. No matter how effective the teaching in our schools, or how excellent the published printed products on our markets, these will have small influence on the public as a whole unless reading is nurtured in the home, and books are considered important there.

A child learns to read by reading his world, by talking and listening. He continues to learn by recognizing and responding to meanings of words as written symbols. He proceeds to generalize relationships between sound and letter symbols. Then he moves from word reading to thought-unit reading. He goes forward to critical reading where speed is flexible and varied, depending upon the type of reading material. Continued enlargement of meaning background aids his growth in word perception skills. He enjoys expressing his reaction to a writer's ideas. Finally, he becomes a mature reader, able to integrate the writer's ideas with his own, building his total reading experiences into his own way of thinking.

The writer's broad definition of reading, that of making all experience a part of oneself and of using the wonderful tools of language to make experience available and manageable, leads into some interesting, often avoided and disregarded, reasons for reading. He recognizes

many of these and has the courage to face them. Through much of the latter part of his book this author expresses the conviction that reading, for whatever reason, holds the answer to learning.

Reasons for reading are numerous and varied. Some people read to find strength to face life's problems by discovering how others have faced similar problems. Some read to restore their faith in the orderly workings of their own minds. Others read to find ready-made answers to perplexing questions about philosophy and science. Still others read to secure vicarious experience in exotic, dangerous, or forbidden practices or behaviors. Some use reading for catharsis. Vicarious experiences, encountered on the printed page, are more easily controlled, managed, and survived without personality damage, or identity loss, than when they are met in actuality.

No matter what reasons lie behind the reading act, some printed materials warrant readers of high maturity rate only. As Mr. Jennings states, the reader's "prior investments in psychological and intellectual securities must have been considerable and sound." According to this author, when one reads as an adult certain conditions are present: awareness that the author is speaking; bringing one's own total experience to bear upon meanings of words and ideas expressed; consciousness of one's feelings as he reads; and a "living-through" of the emotions or situations in which the characters are involved. Even more than these, maturity in reading demands doing something to oneself and one's environment with what he learns from reading. It enables one to extend his intellectual appetites; to expand his world with adventuresome ideas; to stretch his emotional range; and to accelerate his interest in, and understanding of, the nature of man and his works, not the least of which is his own, living self.

Aside from the ideas presented in this book, its vitality stems also from the writer's style. Many of the sentences are short, of simple construction. Meaning flows smoothly, unmistakably. Creative imagery abounds in prolificacy of fresh, appropriate figures of speech.

Physical appearance of the book may deceive the would-be reader who thinks to peruse it in a few moment's leisure, or to scan it quickly. To savour the excitement and exhilaration of its basic communication will cost the price asked of a mature reader: time, considered judgment, and, hopefully, confrontation with original thinking. Likewise, value received is in the coin of the mature reader's realm: "adventure among ideas, feelings and facts;" a psychological "shield, a tool and a powerpack" for his own exclusive, personal use.

# TEN SECOND REVIEWS

*Blanche O. Bush*

Words are things; and a small drop of ink,  
Falling like dew upon a thought, produces  
That which makes thousands, perhaps millions,  
think.  
—Byron

Aaron, I. E., "Reading in Mathematics," *Journal of Reading* (May, 1965), 8:391-395+.

In this article the author urges teachers of mathematics to assume responsibility for teaching special reading skills necessary for reading mathematics effectively. The areas are: Mathematical vocabulary, concept background, ability to select appropriate skills, proficiency in reading word problems, equations, charts, graphs, and tables, and skill in the interpretation of mathematical symbols and abbreviations.

Adams, W. Royce, "Turning a 'Dumping Ground' into an Effective Reading Program," *Journal of Reading* (May, 1965), 8:396-401.

After establishing corrective reading classes, the author drew these conclusions. Trained, interested and creative teachers are of prime importance. The criteria of the program must be adhered to by all. The student's self concept provides the impetus to whatever methods are applied. Problems in word recognition appear to be due to inability to perceive clearly the letter order of words. Screening through diagnostic testing and interviewing before admitting a student into the reading program gives status to the course and removes the "dumping ground" attitude toward reading classes.

Austin, Mary C., "Report Cards and Parents," *The Reading Teacher* (May, 1965), 18:660-663.

Surveys of the desires of parents relative to their child's accomplishment in reading have led to the conclusion that parents want three basic types of information: (1) How well their child is doing in relation to his own abilities, (2) How well he compares with others in his grade, and (3) How well he is progressing toward the accomplishment of major academic and personal goals. The progress report, parent-teacher conferences and a combination of both are discussed. Austin states, however, that the most effective type of report to parents is the informal one given each day by the youngsters themselves in reply to the question, "What did you do in school today?"

Bailey, John P., Jr., "Three Decades of Dr. Seuss," *Elementary English* (January, 1965), 42:7-12.

After reviewing most of the children's books and stories of Theodore Seuss Geisel (Dr. Seuss), the author reported that Seuss' writings fall into three groups. Each has its own characteristics of illustrative style, writing style, and choice of subject matter and follows a definite chronological sequence. A list of Dr. Seuss' books for children is included.

Cutt, Warren G., "Sponsored Research in Reading: Projects and Prospects," *Journal of Reading* (May, 1965), 8:378-383.

The largest coordinated study of beginning reading in the history of education is now in progress through Office of Education contracts. Costing approximately \$800,000 this investigation is actually a group of 27 individual studies being conducted by universities and state departments of education throughout the country. Collectively, the studies are being made to find the best ways of teaching beginning reading in a variety of controlled situations. The methods being compared include phonics approaches, various basal reader systems, the Language-Experience Approach, individualized reading, and new systems such as i/t/a.

Eller, William and Judith Goldman Wolf, "Factors in Critical Reading," *The Philosophical and Sociological Bases of Reading*, Fourteenth Yearbook of the National Reading Conference, Eric L. Thurston and Lawrence E. Hafner, eds. (1965), 14:64-72.

In this article the authors' implications relative to teaching critical reading which they feel are justified on the bases of research and theory are: (1) The conventional academic approach to the development of critical reading ability does not touch upon some of the major sources of "uncriticalness." (2) Research workers who are also specialists in reading instruction should conduct experiments which parallel many of the studies cited herein. (3) Teachers of critical reading should attempt to improve critical reading skills by arming students with an understanding of some factors which ordinarily cause them to be uncritical. (4) Reading comprehension must be reconsidered in terms of evidence handed over by the social psychologists.

Engelhardt, Reata M., "Speed is Not a Naughty Word," *Journal of Reading* (April, 1965), 8:330.

Engelhardt feels that we are training young men and women for today's fast moving society. A student today has to read more; and because no one has been able to lengthen the day, he therefore has to read faster. Furthermore students know they have various reading rates and they are able to judge their material and rate need. "Speed is not a hushed word; instead, there is respect for it."

Freeman, Sophie, "Put 'Create' into Creative Writing," *Elementary English* (April, 1965), 42:401-402.

Children are imaginative, creative and eager for an audience. With patience and teaching, the author believes children can learn to put their own thoughts and experiences on paper. Procedures for helping the child develop the ability to record his ideas are discussed.

Frostig, Marianne, "Corrective Reading in the Classroom," *The Reading Teacher* (April, 1965), 18:573-580.

The author discusses techniques which can be used in conjunction with the basic reader approach, individualized reading approach, and the language experience approach. These auxilliary techniques include labeling or matching words and pictures, a highly controlled vocabulary, and a child's own book based on his experiences.

Godwin, L. Ruth, "Teaching Reading: A Professional Task," *Improving College and University Teaching* (Summer, 1965), 13:172-174.

This article discusses briefly the five instructional needs of reading competency. These are—vocabulary proficiency, reading rate variation, organization skills, research reading skills, and use of the library. The author emphasizes that the responsibility for the development of student reading skills must be accepted by all staff members.

Hardy, Lois Lynn, *How to Study in High School*. Palo Alto, California, Pacific Books, 1961.

Suggestions for improving study habits with definite procedures for improving reading skills are presented in this pamphlet.

Jordan, William C., "Prime-O-Tec—A New Approach to Reading," *The Instructor* (September, 1965), 75:77+.

Basically the Prime-O-Tec process is a simple and new approach to beginning reading. The teacher chooses a set of easy trade books at pre-primer level and puts the story verbatim on tape. She seats the children about the reading table, places the books in their hands, and provides them with earphones. She then turns on the recorder, watches to see that all is working well, and goes to her developmental reading group which needs her assistance. Jordan believes that this is an excellent reading readiness technique.

Kendall, Rose, "Give Them a Chance," *Journal of Reading* (April, 1965), 8:326-329.

In this article the author describes the developmental reading programs presented in a reading laboratory which give the ineffective reader a chance to improve.

King, Paul T. and William Dellande, "The University of Missouri Reading Improvement Program," *Journal of Reading* (April, 1965), 8:307-310.

The purpose of this paper is to outline in a general way the reading program now being sponsored by the University of Missouri. The authors see this program as a developmental method for improving the reading ability of college students and adults.

Kingston, Albert J., "Is Reading What the Reading Test Tests?" *The Philosophical and Sociological Bases of Reading*, Fourteenth Yearbook of the National Reading Conference, Eric L. Thurston and Lawrence E. Hafner, eds., (1965), 14:106-109.

The reading specialists know that standardized reading tests are inadequate in many respects, yet they are the only measures available and so they continue to use them. Kingston conducted an experiment to determine how students behave when administered a reading test under modified conditions. They were given ample time to read the article, list five of the most important ideas read and draw conclusions. The author noted that the type of reading demanded in this test more closely resembles the reading required by the college student in preparing for his daily assignments.

La Fauci, Horatio M., "Team Teaching in a General Education Program," *The Journal of General Education* (July, 1965), 17:149-159.

This article describes team instruction in operation at the college level at Boston University. Team teaching, the author reports, is not a panacea for all ills but rather is a system of instruction, tested and found successful in that it provides an educational environment in which a student can develop his total potential. Organization of a team, faculty responsibilities, obvious advantages and problems are discussed.

Larrick, Nancy, "The Great Game of Chance," *The Reading Teacher* (May, 1965), 18:634-638.

Breaking into print has become the most popular game of chance in the education world. The editorial gambler faces three gnawing questions: (1) Does he have something to say? (2) Will the editor accept his manuscript? (3) Will it be widely read? Larrick suggests that authors limit their subject; be graphic, specific and honest; and avoid cliches, empty words, redundancy, pedagogue and run-on sentences.

Levin, Harry and Nancy S. Meltzer, "This Reading Thing," *American Education Special Report—The Elementary and Secondary Education Act of 1965* (April, 1965), 1:30-32.

Late in 1963 Cornell University applied to the Office of Education for assistance in a developmental project to discover "What reading is." So began Project Literacy. Four national conferences have supported the program and more than seventy researchers from twenty-five universities are cooperating. The authors hope that as a result of this project, instruction will no longer be a matter of changes in fad or fashion and that it will determine what "reading really is."

McCormick, Nancy, "Individualized Reading in Action," *The Instructor* (September, 1965), 75:73-77.

Experimenting with individualized reading for five years has proved to the author that children love to read when they do so at their own speed and from their own selected material. Materials, cataloging of books for the children, organization of the program, procedures, record keeping and evaluation are discussed.



Millis, George H., "Let's Use Oral Reading Right," *Grade Teacher* (September, 1965), 83:103.

During the past decade there has been a revival of interest in oral reading. To make oral reading of real value, the author urges that teachers not return to the old practice of having pupils take turns reading passages that other pupils have already read. Instead, the author suggests more flexible grouping in the classroom and that oral reading be for an audience, with the child having a real purpose for reading and the audience a real purpose for listening.

Nason, H. M., "Multimedia in Reading Instruction," *The Reading Teacher* (May, 1965), 18:654-659.

Nason believes that no one medium can be isolated from other media. Educational television, films, filmstrips, overhead projectors, videotapes, recorders, tape recordings, tachistoscopes, and the traditional classroom procedures all must be brought to bear in one coordinated effort if the child is to develop into a good reader without unnecessary conflict and frustration.

Okyne, Robert R., "The Problem of Spelling in the Middle School," *Ghana Teacher's Journal* (January, 1965), No. 45.

Observations made relative to teaching spelling in the upper forms of the middle schools in Ghana include: (1) Listening, speaking, reading, writing and spelling should be thought of as one activity. (2) Proper grading of vocabulary is essential—words should not be beyond the pupil's comprehension. (3) Systematic instruction is necessary after pupils have acquired a large amount of sight vocabulary. (4) Words that the child needs to use should be taught. (5) Spelling should be taught in relation to other aspects of English such as correct pronunciation and clear enunciation. (6) Spelling is needed for reading as well as for writing. (7) Spelling should be taught functionally both by reference to dictionary and by direct reading.

O'Leary, Helen and Robert F. Murphy, "Creative Book Reporting," *The Instructor* (September, 1965), 75:60.

A project undertaken at Marks' Meadow Observation Laboratory School at the University of Massachusetts was designed to motivate creative book reports. By joint pupil-teacher discussion, thirty stimulants or suggestions were developed based

on the readers' interest and reading levels and arranged in alphabetized order for easy reference.

Petty, Walter T. and Paul C. Burns, "A Summary of Investigations Relating to the English Language Arts in Elementary Education," *Elementary English* (April, 1965), 42:411-431.

Sixty-seven studies and ten summaries of research are reviewed in this fourth annual review of reported research in elementary school English language arts. The large majority of studies deals with various aspects of reading instruction, but there is an increase in the number of studies related to written expression. Research on oral language continues to receive least attention.

Ruark, Henry C., Jr., "Materials—Lifeblood of Instruction," *Educational Screen and Audiovisual AV Guide* (August, 1965), 44:11.

The instructional process, according to the author, is the heart of education and the flow of instructional materials mediating that process is its "lifeblood." If teachers are to be effective, they must have at their command not only more materials but better materials. If these materials are readily accessible, the teacher can spend more time in diagnosing difficulties, prescribing solutions, and guiding the learner.

Simmons, John S., "Reasoning Through Reading," *Journal of Reading* (April, 1965), 8:311-314.

In what we now rather casually accept as an increasingly complex society, the ability to read printed matter with insight is, and will continue to be, of vital importance. Simmons identifies four characteristics that are found in critical reading. (1) Critical reading is a skill which involves cumulative comprehension. It includes entities—that which is explicit and also higher mental processes. It can be contrasted with literal reading, as critical reading is a process which goes beyond the passive acceptance of ideas and information stated in print. Critical reading becomes a habit of examining printed statements and attacking problems in the light of related objective evidence.

Smith, Nila B., "Parents are People," *The Reading Teacher* (May, 1965), 18:624-628.

Anyone who teaches reading at any of its levels or in any

of its specialties has dozens and dozens of contacts with people, most of whom are parents in their out-of-school life. If a teacher's ear is attuned to opportunities to "put things in a better light" and is willing to take the time to do it, a great service to schools and to teachers, and to all concerned with reading instruction can be performed. When parents fully realize that the teacher is deeply interested, that she wants to help, that she can help, and that she is able to give reasonable explanations, the floodgates are opened. Information flows freely and criticism melts away.

Sohn, David A., "The Promise of Paperbacks," *The Philosophical and Sociological Bases of Reading*, Fourteenth Yearbook of the National Reading Conference, Eric L. Thurston and Lawrence E. Hafner, eds., (1965), 14:57-63.

One way to surround our students with good reading without going bankrupt is to consider the paperback and what it can do for our cause. It is estimated that there are now over 30,000 titles in paperback form at this time and over one million paperbacks are sold during each business day. Its promise is powerful if we learn to use its potential to build the love of reading.

Stanchfield, Jo M., "The Reading Specialist in the Junior High School," *Journal of Reading* (April, 1965), 8:301-306.

With the need for increased education to compete effectively in our highly technological and complex culture and with the tragic consequences of the high school dropout and the jobless youth, the author emphasized the idea that reading specialists in the junior high should be expanded in number. To enable the reading specialist to function at maximum efficiency in a rapidly changing society, Stanchfield urges that studies in such areas as norms for reading classes, motivation of interests, collection and use of materials, in-service training, use of outstanding resource people in the field of reading, and pre-service preparation of secondary teacher be promoted.

Tremonti, Rev. Joseph B., "The Contribution of College Reading Specialists to Pre-College Reading Programs," *The Philosophical and Sociological Bases of Reading*, Fourteenth Yearbook of the National Reading Conference, Eric L. Thurston and Lawrence E. Hafner, eds., (1965), 14:81-87.

The author states that it is evident that the contributions of college reading specialists to pre-college programs are broad in scope and effective in nature. While there is a variation in the contributions made by college reading specialists from campus to campus, there are, nonetheless, salient, identifying characteristics of high quality programs which this presentation has sought to enumerate and describe. The author emphasizes that we cannot rest upon our laurels as much remains to be done in research and program improvement.

Walker, Jerry L., "Conducting an Individualized Reading Program in High School," *Journal of Reading* (April, 1965), 8:291-295.

English teachers, the author states, should lead the way to individualized reading programs. The first step, the author believes, in conducting an individualized program is to gather as much information as possible about each student. A good individualized reading program, according to Walker, is marked not so much by what a student reads as by how he reads.

Wark, David M., "Twenty-five Years of Research on Adult Reading," *The Philosophical and Sociological Bases of Reading*, Fourteenth Yearbook of the National Reading Conference, Eric L. Thurston and Lawrence E. Hafner, eds., (1965), 14:218-222.

In this article the author has attempted to trace the trends of twenty-five years of research on adult reading based on analysis of data as placed in categories. Wark concluded that social events like World War II and the influx of returning veterans, and technological advances such as television have had some effect upon adult reading.

Weaver, Wendell W., "Theoretical Aspects of the Cloze Procedure," *The Philosophical and Sociological Bases of Reading*, Fourteenth Yearbook of the National Reading Conference, Eric L. Thurston and Lawrence E. Hafner, eds., (1965), 14:115-132.

The cloze procedure spreads before the subject a language sequence in a relatively normal form. At some points in the sequence, however, rather than a sign to recognize and match, there is a gap in the sequence. Where most reading input supplies a certain, direct cue to the matching mechanisms of the organism, the cloze procedure requires an analysis, a search of a distribution of probable elements in order to arrive at a "most likely" one in the light of the reduced cues which are

presented. The author emphasizes that the cloze procedure and its variations carry major theoretical implications for a psychology of language and thought.

Weber, Helen, "Time for Reading," *Teaching Aids News—The Magazine of Educational Technology* (July 14, 1965), 5:13.

You need only one requirement, according to Weber, to be well read, "The will to read." If you have the will you have the time, no matter how busy you are. Keep your book at hand.

Woolf, Maurice D., "Ego Strength and Reading Disability," *The Philosophical and Sociological Bases of Reading*, Fourteenth Yearbook of the National Reading Conference, Eric L. Thurston and Lawrence E. Hafner, eds., (1965), 14:73-79.

The purpose of this study was to discover the relationship of ego strength to reading disability. The author hypothesized that poor readers would have less ego strength when compared to good readers using the ego strength research scale of the M.M.P.I. as a measure. The hypothesis was confirmed showing a statistically significant difference between the two groups. Other scales on which significant difference were found were K (anxiety) and Pt (psychasthenia). All three of these variables are apparently linked with reading disability.

# PROGRAM

## 1965-66

HOMER L. J. CARTER READING COUNCIL  
OF THE  
INTERNATIONAL READING ASSOCIATION

Theme: *READING IN A CHANGING SOCIETY*

THURSDAY, SEPTEMBER 23, 1965

### SYMPOSIUM

“Pertinent Issues in a Changing Society”

Otto Yntema, WMU, Chairman

J. Ross Eshleman, WMU

Malcolm H. Robertson, WMU

Russell H. Seibert, WMU

7:30 P.M., University Student Center,  
Western Michigan University

THURSDAY, OCTOBER 28, 1965

“Preparing Reading Teachers for a New Society”

Sister M. Bernetta, O. P., Aquinas College

### Joint Meeting

Calhoun Cooperative Reading Council

7:30 P.M., University Student Center,  
Western Michigan University

THURSDAY, DECEMBER 2, 1965

“Operation Head Start”

Sara R. Swickard, WMU

7:30 P.M., University Student Center,  
Western Michigan University

THURSDAY, JANUARY 27, 1966

DEMONSTRATION

“Beginning Reading with I.T.A.”  
(Initial Teaching Alphabet)

Ruth L. Bosma, WMU Campus School

7:30 P.M., University Student Center,  
Western Michigan University

THURSDAY, FEBRUARY 24, 1966

“Concept Development in Science”  
Jacqueline Mallinson, WMU

7:30 P.M., University Student Center,  
Western Michigan University

THURSDAY, APRIL 28, 1966

DINNER MEETING

“Reading in a Changing Society”  
Mildred Smith  
Flint Public Schools

6:30 P.M., Hillside School

