

Spelling Progress Bulletin

Dedicated to finding the causes of difficulties in learning reading and spelling.

"A closed mind gathers no knowledge*, an open mind is the key to wisdom."

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In Memoriam

Helen Emily Bowyer, born Dec. 7, 1880 in Windsor, Ont., Canada. After an apparently. successful operation for a tumor on Jan. 16, she succumbed to heart failure Jan. 25, 1969.

After a long career as a grade teacher in Canada and Detroit, she retired in 1946. She then taught for 3 years in Mexico City and did social service work in California.

She is remembered by her poems and her warm, humanistic writings in such educational magazines as Phi Delta Kappan, Columbia University Forum, Education, Elementary English, California Teachers journal, International Language Review, where she edited a section on Spelling Reform.

She was also the author of *Where is the Promise of His Coming*, Exposition Press, 1968, under the nom-de-plume of Elena Arquero.

She is greatly missed by all who knew her. She often said she was probably the only spelling reformer that didn't have an alfabet that was being pushed.

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Announcements

The Eighth Annual Conference of the Reading Reform Foundation will be held at the San Francisco Hilton, in San Francisco, Calif. on July 9-10. The first day will be the general meeting and the second day will have the workshops.

To fill a void noticed in the American educational press, the Canadians last summer launched a new society, Reading Methods Research Association. At the July 10, 1968 meeting held in Winnipeg,

the following officers were elected:

President: Mrs. Mary Johnson, Winnipeg, Man.

1st Vice-President: Mrs. Mary Andree, Transconia, Man.

2nd Vice-President: Mrs. Alys Robertson, Winnipeg, Man.

Secretary: Mrs. Sheila Beckett, East Kildonan, Man.

Treasurer: Mrs. Olga Fuga, Winnipeg, Man.

Chairman Research Committee: Mrs. Kathryn Diehl, Lima, Ohio.

One of the first projects of this committee will be the gathering of statistical research data on the six basal series which were adopted this year by the Calif. State Department of Education at a cost of \$25 million.

This summer the President, Mrs. Mary Johnson, conducted informal surveys of oral reading ability in public parks in Helena, Montana, Salt Lake City, Utah, and in San Francisco, Calif. On an average, the American Grade One graduates were able to read new words with 16% more accuracy than a cross-section (149) of Winnipeg children at the same level, tested in 1967. A copy of the results of the oral reading of the 66 children tested in and near San Francisco is available from the Assoc.

Five prominent educators with experience in the field of reading research have honored the RMRA by accepting positions on the Advisory Council:

Dr. Grace Brown, teacher training instructress, City College, San Francisco, Calif.

Mrs. Elizabeth Cook, Reading Consultant, Dept. of Public Instruction, Phoenix, Ariz.

Dr. Helen Henrikson, Queens University, Kingston, Ont.

Dr. Andrew Moore, former Vice-Chairman, Winnipeg School Board, and former high school Inspector.

Dr. Kiyoshi Makita, Dept. of Neuropsychiatry, Keio Gijuku University, Tokyo.

Dr. Makita writes that Japanese children are taught to read and pronounce English (a compulsory subject, beginning in junior High) with the aid of the International Phonetic alphabet. Since the start of this practice, he says, learning difficulties have noticeably decreased and their pronunciation considerably improved.

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William J. Reed, Hon. Secretary of the British Simplified Spelling Society reports that since the SSS has become more active in advertising, with small ads placed in educational magazines, educational supplements of large newspapers, it has been helpful in getting new members and publicity on radio and T.V. Secretary Reed was interviewed during peak viewing time on Southern Television.

From the L.A. Herald-Examiner: Most drop-outs will tell you they just couldn't read and keep up with the other pupils. In a recent 13-state comparison, 7th graders chosen from parochial schools outread sophomores in high schools that had not been taught to read phonetically. Also their comprehension was far superior in all subjects.

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[Spelling Progress Bulletin Spring 1969 pp2-10]

An Experiment in Methodology Using a Phonetic Alphabet, by Beatrix Tudor-Hart*

*Reading Research Unit, Institute of Education, Univ. of London.

The Background of the Experiment

There has been a great deal of controversy about Sir James Pitman's initial teaching alphabet ever since the results of the first experiment, using this medium in the teaching of reading, came out in 1963. This has been due partly to the almost natural reactions of people whose long cherished beliefs are challenged and partly to the conflicting findings of other researchers, who have tried out this medium since 1963, and not had the same results. The controversy as well as the contradictory findings of others, are both the result of failure of the original experiment to either study or control the methods by which this medium was put into operation. Because teaching method was not controlled in the original experiment, it was of course, impossible to assess *why*, and in *what way*, the use of i.t.a. enabled children to learn quicker. And it was because different methods were used by later researchers that they obtained different results.

It is a very obvious and well known fact that in the learning of any skill, a method may be suited to a special medium or tool and neither is necessarily as well suited to any other method.

In reading this is particularly true. In assessing, therefore, the usefulness of a printed medium of writing it is necessary to know *the method* that is going to be used to teach reading. Sir James Pitman's alphabet is essentially a phonic regularizing of letters which have, in the course of some hundreds of years, acquired more than one sound each and, in combinations, are often contradictory. The Pitman alphabet of 43 letters represents a visual form of the 43 sounds which are the basic ones of the English language. There is therefore a one-to-one correspondence - each letter has only one sound. Once you have learned the 43 sounds and their corresponding symbols you are able to decipher any printed word, and can usually build any word. (the limitations are discussed later).

If, however, reading is taught by the present method most widely used in this country, the Look-Say method, in which separate letters with their separate sound values are ignored, and the teacher relies on a child's ability to memorize the whole word visual pattern as a pattern, then it matters not at all what the separate letters are. In fact, if we taught reading entirely by Look-Say, never introducing any letter sounds at all, we could dispense with an alphabet entirely and imitate the Chinese: only learning to read would take anything up to ten years to achieve.

The original experiment with the initial teaching alphabet was carried out mostly in schools in the Midlands, where 'phonic' teaching has remained more fashionable than in the South of England in the last two decades. The less satisfactory results of using this alphabet were obtained when it began to be used by schools in which Look-say is the basic reading method, mostly in the Southeast of England.

In view of the controversy about reading methods as well as about this new alphabet, it was suggested that an experiment be carried out using the initial teaching alphabet, to test the comparative values of 'sight' reading and 'phonic' reading at the beginning of learning to read.

The Experiment

The Reading Research Unit of the London Institute of Education was able to start this experiment thanks to a grant from the Ford Foundation.

The grant was exhausted before the experiment was concluded. Fortunately, help arrived from another source and financed the final year.

As the Reading Research Unit was located in London, for practical purposes it was decided to restrict the choice of schools to the South East of England. Forty education authorities were approached, including London. Nine volunteered to place local primary schools at our disposal, if the head teachers were interested. A meeting was held by each of these authorities to which all heads of infant and primary schools were invited to hear about the experiment. 17 schools only volunteered to carry out the experiment. As the total number of children this involved gave us only the basic minimum for each side of the experiment, some 400 pupils, in practice we had no choice in trying to get a balance of similar schools on either side. Fortunately, however, it so happened that the schools lined themselves up in such a way that we got both balance of similarity on either side and a wide diversity of schools, in toto, ranging from very large to very small, urban and rural, infant only and primary schools. We had therefore, not only an equal balance of privileged and underprivileged children on each side of the experiment, but a very wide range of social backgrounds throughout all the schools. Four schools were sufficiently big to have reception classes and therefore undertook to carry out both sides of the experiment. Two of these were primary schools; one in a highly industrialised county town, the other in a small, still rather rural, country town. The other two were large infant schools in county towns beginning to be industrialised. Of the other 13 schools, four volunteered to start with 'sight' reading in 8 classes (two schools with three classes each) and 9 volunteered to start with 'phonics' i.e. letters and letter sounds, one offering two reception groups.

The planning, organization and collection of material, as well as finding the schools, took four months, Sept. to Dec. 1964. The experiment began in some of the schools in January, 1965. The last infant classes to start began in Sept. 1965. We had therefore, two groups of children; those who would finish infant school to July 1967, and those who would finish in July, 1968. The experiment was concluded when the last group of children left infant school last July. Since 12 of the schools are either primary schools or infant schools working in close cooperation with a junior school to which all the children go, we shall, in fact, be able to follow all the children from these schools to see how they fare. We are naturally particularly interested in the slow readers from all schools.

The Teaching Methods

The two teaching methods and the teaching material to be used were as follows:

1. Those beginning with Look-say reading will be called 'sight' readers; all these pupils began by learning by sight a vocabulary of 52 words which are found in the first four Downing Readers, finishing with Revision Book 1. This procedure was carried out by the class teachers following the normal Look-say teaching method.

The next step for the children consisted in learning the 42 letter sounds and learning to build monosyllabic nouns, while at the same time continuing their book reading. The material used for the 'phonic' work was the same as that used by the 'phonic' children at the start of their learning; the teaching was the same as that used by the teachers of the 'phonic' learners.

2. For the children beginning with phonics, the method was basically a self-teaching one, using self explanatory material. Sets of 42 letter alphabet cards, each with an illustration of an object whose name begins with that letter; similar sets of illustrated monosyllabic nouns (42). Children were given only ten letters at a time. When these were learnt the children were given the ten nouns composed of letters within this group. When the children could read these, not only by building them, but also by sight, they proceeded to the next group of letters and nouns. Teachers used sets of

separated cards to check that the children did read the letters and were not simply looking at the pictures to remember. The next step was sentence building. Similar cards were used as for the first two steps; that is each short sentence (concrete noun-active verb sentences) was illustrated to ease comprehension and facilitate 'fluent' sight reading after word building. During the time the children were building the short sentences they practiced the sounds made by double and treble consonants as well as the *er*, *ir*, *ur*, the *or*, *ar*, and *air* sounds. These were all illustrated on small cards carrying the picture of an object whose name begins with that sound and followed by three other names all beginning that way, i.e. grapes, grab, grip, grub, with the picture of a bunch of grapes. The 'sight' children also had these cards.

When the children had read most of the short sentences and could match the separated cards with their pictures, they went on to longer sentences which introduced them to the very difficult abstract words such as prepositions and pronouns; as soon as they wanted to they were allowed to start on any of the reading books which the sight children were using, that is, the Downing Readers.

Reading Readiness

In order to have an objective standard of reading readiness for all the children, so that each child, whichever group he belonged to, would only begin systematic lessons at the same mental level, the Harrison-Stroud Reading Readiness Profiles were used. All the teachers were instructed not to start any child on reading until he or she had passed the test successfully. We used the word matching (pages 5 and 6) and the sound matching (pages 9 and 10) sections of the Profiles. The use of this test had another advantage. In order to help the children to achieve reading readiness all the teachers were encouraged to follow the instruction to give the children all kinds of games in the field of visual and auditory discrimination. In this way, the 'sight' children had as many 'sound' games as the 'phonic' children and the 'phonic' children had as many 'visual pattern' games as the 'sight' children. *This should be remembered when considering the reading test results.*

On both sides of the experiment children only started to learn to read when they had succeeded in passing the reading readiness test. Unfortunately not all the children could be given this test. The Profiles did not materialise until the Spring of 1965. Three classes, which entered the experiment in Jan. 1965, were composed of children who had, in fact, entered in Sept. 1964: of these, 60 had birthdays falling before Sept. 1st and would therefore have only two years in infant school. One of these classes had already started learning to read, but as it was in the 'sight' group, and was using the Downing Readers, it was possible to use it without, of course, having any information about the reading readiness other than the teacher's estimate. The second class was in a school in which the head teacher insists that every reception class uses the first term as a preschool term. The Jan. term was therefore the first school term for learning. The third class was in a school which opted to be in the experiment in Sept. 1964, one term before the experiment could begin in practice. The class teacher agreed to put off all formal teaching until the Winter term. In practice, therefore, of these three classes, the only children to be given the reading readiness test were the slow ones who had not yet started in the Summer term of 1965.

There were some 60 children in this group, 50 in the 'sight' group and 10 in the 'phonic' group. Of all the children who started in Jan. 1965, 58 had started reading on their teacher's estimate before the Profiles had arrived. Of the 800 children therefore about 120 did not have the reading readiness test. The teachers had, however, been instructed before the experiment began, not to start any child on a reading program until she was sure he or she was quite ready. The tables giving ages for reading readiness includes this group of children.

The Schools

Since we had no choice of schools - having only 17 that offered themselves, with a maximum of 800 children (400 on either side) - we could not select for even distribution. But as it usually

happens with random selection, we obtained an excellent cross-section of school population which was evenly divided between the two sides of the experiment. Two large schools, one in a slightly industrialized county town and one in a very highly industrialized county town, did both sides of the experiment. So did two large infant schools in an industrialized county town. Five small county primary schools were on the 'phonic' side as against two on the 'sight' side. Two medium sized infant schools in a semi-industrialized county town on the 'sight' side were balanced by one in a very similar locality on the 'phonic' side. One medium sized primary school in a county town on the 'phonic' side was balanced by a similar, tho slightly bigger, one on the 'sight' side, where there were three classes in the experiment. The total number of boys who started on the 'phonic' side was 222 and 221 on the 'sight' side. For girls, there were 227 on the 'phonic' side and 206 on the 'sight' side. The reason for the greater number on the 'phonic' side was that more schools were represented, altho two schools on the 'sight' side offered 3 reception classes each. But for some reason, we lost more pupils from the 'phonic' group throughout the four years than from the 'sight' group. At the end of the experiment, only 360 out of the 449 'phonic' children were still in the school at the time of the last test; only 378 out of the 427 'sight' children. There were therefore more 'sight' children at the end of the infant school years than 'phonic' ones.

Intelligence Quotients

The Creighton Vocabulary Test and the Raven's Matrices Tests were given to the children who entered during the year 1964-65. There were 160 in the 'sight' group and 233 in the 'phonic.' It was because we had not enrolled the minimum of 400 on either side that we had to lengthen the experimental period to include children entering in 1965-66. We did not give I.Q. tests to these latter as we found the distribution of Creighton tests gave no significant difference between the 160 'sight' children and the 233 'phonic' children; they were in fact very evenly balanced; moreover the distribution of I.Q.'s in every class was as broad and even as one would expect in any random sample.

The equal balance of ability on each side of the experiment was further confirmed by the results of the Reading Readiness tests. If intelligence is evenly distributed in each group of children, the same number of children on either side would be reading-ready at any given age: the following table gives the figures for four monthly interval age groups.

Reading Readiness Tests

age of child in 4 month tables from 4:8 to 7 years.

group	4:8-5	5-5:4	5:4-5:8	5:8-6	6-6:4	6:4-6:8	6:8-7	total
<i>sight</i>	28	110	167	74	19	7	2	407
<i>phonic</i>	31	117	153	72	19	3	1	396

Stage 1 of the Experiment

In order to keep as many variables as possible equal, all the reading material which could be shared in common, was. The letter-sound, the word-building, and the double and treble consonant-sound cards, which the 'phonic' children began with, were used for teaching the 'sight' children their letter-sounds and word-building. The 'phonic' children went onto the Downing Readers when they were ready for story reading. The only different material used with one group was that which made up the short and long sentences which the 'phonic' children had after learning their letters and word-building, and before they went onto reading continuous narrative. As we shall see further on when discussing something which began with 'sight' reading, this material may have played a significant role in helping the 'phonic' children after their initial success in Test 1.

In this particular experiment we had two groups of children, of equally distributed intelligence, who both had the same reading readiness training and who both started reading at the same visual and auditory mental discrimination level (the Harrison-Stroud reading readiness profiles). The class

teachers on both sides were enthusiastic for the method they chose and all volunteered to carry out the experiment: the same reading material being used for both groups of children with the exception of the short and long sentences, whose effect will be discussed further on.

The experiment was organized so that the children should be tested on what they had learned at each step, before embarking on the next; this would enable us to compare the progress of the two groups. For the sight children, the first step was to learn the 52 word vocabulary of the first four readers. They therefore had their first reading test when they could successfully read the first revision book. For the 'phonic' children, their first step was to learn 42 letter-sounds and to build monosyllabic nouns. So they had their first test when this stage was completed.

The first reading test consisted of two pages of words. One page carried the 52 words of the Downing Readers; the other the 42 monosyllabic nouns of the phonic reading material. Both groups of children were asked to read these two pages of words. Each child was, shown first the list of words he or she had learnt and secondly the list of unfamiliar words. At this first test (which for some came a few weeks after reading readiness and for others a year or more later), the results for the two groups showed a very interesting and significant difference. The 'sight' children could not read the 'phonic' readers' monosyllabic nouns, other than the two names which the two lists had in common, *cat* and *house*. The most frequent comment made by these children was: "I can't read these words because my teacher has not taught me them." The 'phonic' children on the other hand, were rather excited at seeing a list of unknown words and started reading. They read the concrete nouns with ease, but found the abstract words puzzling. They would build 'h-a-v' and say hesitatingly 'have.... I don't know what "have" is.' In spite of not having read any abstract words before, and no two-syllable words either, none of these children read less than 30 of the 52 words and the majority read 40 and over. Of the 'sight' children there were 13 in one class who, by mistake, had started learning their letter sounds before they had their first test. There were three others who had learnt letter sounds at home. All these children were able to read most of the phonic list of words. But of all the others, a few knew one, two or three names and this was because they had been taught them as whole words by teacher or parents.

Table 2

Number of Months from Reading Readiness to Test 1

group	1	2	3	4	5	6	7	8	9	10	11	12	over12	total	*
sight	4	36	51	69	60	34	31	17	16	12	15	6	11	362	160
phonic	29	54	59	74	36	34	24	19	12	23	4	10	9	387	216

*total after 4 months

As reading readiness tests had been given to the children, it was possible to record for each child the length of time he or she took to reach the first test. (see table 2) Note that while 160 'sight' pupils came to test 1 in four months, 216 'phonic' pupils achieved this same goal in the same time.

Table 2 does not include the children who did not have the Harrison-Stroud test. Using this test gave added information about the ages at which different children reach the mental level required for learning.

Assessment of Results at Test 1

If a little child, in looking at a row of words, of which only two are exactly the same, says, "They are all the same," it seems obvious that he *cannot* be ready to learn to read. Nor, in fact, is he ready if he cannot distinguish the 'sounds' within a single spoken word. There is a wide-spread belief that human beings can be divided neatly into two categories, one being visual and the other auditory; the visual people learn to read mostly by sight and the auditory mostly by ear. While it is a truism that

most people have slightly unevenly developed senses, it is just as true that *both* sight and vision are essential for reading as we very well know from the difficulties experienced by deaf and blind children.

Another outcome of this reading readiness test was a clear indication of the levels of auditory and visual discrimination in the children. The majority of the children were equally successful, or unsuccessful, in the two tests. There were only four clear examples of children who had good visual discrimination and no auditory discrimination at all; two of them proved to be partially deaf. Several children on both sides found sound discrimination *easier* than visual.

From the results in Table 2 it would seem that it is no more, and no less, difficult for a child to either memorize 52 visual patterns by sight or to learn to read any monosyllabic or two syllable word. There is, however, one very curious difference. For highly intelligent children, those who learnt within a month, it appears that it is *much* easier to learn letters and word-building than it is to memorize 52 word patterns.

Table 3 shows the number of children in each group who reached Test 1 between 5 and 7 years, given in four monthly age groups.

Table 3

Age in 4 monthly divisions, at Test 1

children	5-5:4	5:4-5:8	5:8-6	6-6:4	6:4-6:8	7+	total
sight	22	73	169	80	28	3	391
phonic	30	115	134	70	32	7	402

If anything, this table shows that more children were able, at an early age (between 5 and 5:8) to learn letters and to word-build than to memorize visual word patterns.

Test 2. Schonell word-graded vocabulary

The second test the children had was the Schonell word-graded vocabulary, which was given six months after the first test. The 'sight' children had by then learnt their letter sounds and to word-build. The 'phonic' children had increased their vocabularies by short and long sentence reading. The difference in the two groups' reading abilities now came out quite clearly.

Table 4. Schonell wordgraded vocabulary

words read

children	0-10	11-20	21-30	31-40	41 plus	total
sight	61	102	83	98	20	364
	16.8%	28.0%	22.8%	26.9%	5.5%	
phonic	-	29	105	177	61	372
		7.8%	28.2%	47.6%	16.4%	

One unmistakable difference between the two groups was in their difference in attack on new words. In spite of learning all their letter sounds and also having practiced word-building, many of the 'sight' children would first make a wild guess at an unfamiliar word. When it was suggested that they should try to build the letters, they would start *spelling* out the *names of the letters*, and then remember; or they would begin correctly giving the letter sounds and then forget and read the next letter by name.

None of the poor readers could build any two syllable word. The children who read less than 10 words were virtually non-readers. Most of them thought they could read for they said, "I *can* read my books." They had the illusion that memorizing spoken speech was reading and apparently no

one had disillusioned them. Apart from these children, who had the illusion of reading at the Schonell test time, there were 32 other children in the 'sight' group who moved into the junior school before they reached the Schonell test stage. One had succeeded in memorizing 45 words by the time he left infant school, two had not been able to tackle test 1 at the end of two years and two years and one term respectively. In one infant school where we had three reception classes, two of the classes had nine children each, who had failed to reach this stage. In one class there were 7 who had failed even to learn the 52 words and two who had not yet reached the Schonell test stage. The other class had only two who had not learnt the 52 words and seven who had not reached the Schonell stage. Unfortunately all but four of these 32 children moved into junior schools with which we are not in touch.

The 'phonic' children who reached the Schonell test stage could read most fairly well, as table 4 shows. There were, however, 18 children who left the infant school before they reached that stage; one girl entered junior school (at 7:7 years) only six months after she had succeeded in the reading readiness test. In the junior school she reached the first test stage, scoring 42 and 30 on the cards, then the Schonell test, scoring 20, and took the Standish Comprehension (score 8) last July when she was 9:6 years old, having taken 2½ years to learn to read. She was the slowest of all the 'normal' children the experimenter has ever met. One other girl also moved into junior school only a few months after being reading ready. She is partially deaf and was only just 7 years old at the transfer. She took the Standish Comprehension Test in July, 1967 at the age of 8 and scored 9 (the raw score average of a child of 6:11). Two very disturbed children had been reading ready in the infant school but made no attempt to learn. One has gone to another school and has been lost to us; the other will be followed to junior school. Nine other children in two classes failed to reach the Schonell test stage in the infant school; they had the test in their first junior year scoring: 15, 17, 18, 19, 21, 25, 39, 33, 36 respectively. Four other children scored 24, 26, 33, 33 on the Schonell test in their first junior year.

The difference between 18 and 32 expressed as averages of about 400 on each side, is itself a significant one, of children slow at reading by either method. What is even more significant is the difference between the two groups' ability and understanding at the time they left infant school. As the Schonell test results show, there were, as well as the 32 who never reached the test, 61 other children who were virtually non-readers (reading less than 10 words) in the 'sight' group. Now the chief characteristic of these 93 children (Y4 of the total), was that they had no clue at all about 'how' to read and therefore 'how' to tackle a new, unfamiliar word, at the Schonell test stage.

Of the 18 'phonic' children, on the other hand, altho they moved into junior school before the Schonell test (two even before test 1), 14 knew 'how' to read, that is, build letter sounds into meaningful words. It was because of this that they did relatively well in their Schonell test, which they took in the junior school at the correct time in relation to their first test. It is unfortunate that of the 32 'sight' children, 21 went on into junior schools with which we are not in touch.

Since the ages of the children at the time they had the Schonell test was recorded and this test was always given six months after: 1) the 'sight' children had begun to learn their letters and 2) the 'phonic' children had begun sentence building, it was possible to compare not only the word reading abilities of the two groups, but also the age at which they had achieved this ability. Table 5 gives the distribution of ages at the time of the Schonell test for the children in both groups, in monthly divisions.

Table 5

	5 years and						6 years and						
children	6	7	8	9	10	11	0	1	2	3	4	5	6
sight	1	3	2	6	6	13	13	16	32	28	43	33	37
phonic	2	1	6	12	13	22	22	20	50	25	35	24	29
	7 years and												
children	7	8	9	10	11	0	1	2	3	4	5	6	total
sight	24	24	25	8	6	9	1	4	5	2	-	1	342
phonic	19	23	15	15	11	7	4	4	7	2	1	2	369

Not only did the 'phonic' children read words significantly better than the 'sight' children, but there were nearly twice as many 'phonic' children who did this between 5 and 6 years of age. For the very quick learner then, a phonic approach is doubly helpful.

The Value of the Schonell Word-Graded Vocabulary Test

The Schonell test is, of course, not necessarily a test of comprehension; it is essentially one of the child's ability to decipher. However, it must always be remembered that deciphering is essential to, even if not always sufficient for, comprehension. If you cannot decipher, you obviously cannot even begin to understand since you really cannot read at all.

Why did the children who began with sight reading do so poorly on the Schonell test? For by that time they had had exactly the same 'phonic' teaching, using the same material with which the 'phonic' children had begun. Moreover, since 'phonics' were introduced when these children were *older* than the 'phonic' children were when they started, they should have been quicker at picking up the sounds and blending them. This would be the argument of those who hold with Look-Say to begin with, because 'phonics' are too difficult for little children. But this did not happen. At the Schonell test, the difference in 'attack' on new words between the two groups was quite unmistakable. Because the 'phonic' children *never confused letter names with letter sounds*, they all read monosyllabic words with ease. Only the very slow children had difficulty in syllabic reading and hence comprehending two and three syllable words. The majority read every word either by sight or built syllabically without hesitation. The 'sight' children when faced with an unfamiliar word, most frequently 'guessed' without any particular attention to the appearance of the word. When told to 'build,' they often used the *letter names instead of their sounds*. The most likely explanation of the difference between the two groups is that the 'sight' children had only six months of reading by 'sound building' instead of visual memory and that these six months had begun *after* they had had from six months to nearly two years of reading by sight *without being made aware of any other kind of reading*. The introduction of phonics, as letter sounds and building, must have bewildered the children used to thinking of reading as consisting of memorizing whole word patterns by sight. If, as some educators believe they can, children *were* able to deduce on their own that each symbol represents a specific sound, the 'sight' children would have been able to build words from sound-symbol combinations on their own from the time they learned their very first sight words. For *all writing was in i.t.a., not T. O.*

The 'phonic' children, on the other hand, from the very beginning had to build from separate letter sounds in order to achieve 'sight' reading. It therefore never occurred to them even to try to sight read an unfamiliar word. They automatically 'sounded' every new word. Besides, they had been doing this word building from the very beginning and so had had from one month to nearly three years of practice. The 'phonic' children who continued to sound out words they had already read before, were few. I am certain they would be the children who, as Look-sayers, would have been dyslectic - in fact, non-readers like the 22 on the Look-say side.

The Standish Comprehension Test

This confusion of visual whole word pattern with sound building may be equally responsible for the difference in test results for the Standish Comprehension Test which the children had at the end of their last summer term in the infant school. Table 6 gives these results.

Table 6

S=sight N=336 P=phonic N=340

Nos. read	S		Nos. read	S		Nos. read	S		Nos. read	S		Nos. read	S		P
	S	P		S	P		S	P		S	P		S	P	
0	2	-	9	8	7	14	8	13	19	16	11	25	17	24	
1	-	-	10	4	4	15	10	9	20	13	18	26	22	24	
2	2	-	11	9	9	16	7	10	21	27	17	27	8	22	
3	3	-	12	11	4	17	18	11	22	17	17	28	13	26	
4	3	-	13	16	10	18	20	18	23	20	27	29	4	14	
5	6	2							24	24	10	30	3	12	
6	9	4													
7	8	8													
8	8	9													
	41	23		48	34		63	61		117	100		67	122	
%	12.2	6.8		14.4	10.0		18.8	17.9		34.8	29.4		19.9	35.0	

As one would expect, with the increasing length of time that the children have been learning to read, the bulk of the children are closer together in achievement. That is to say, the 'sight' children have begun to catch up with those who began with letter sounds. But the differences show very clearly at the two ends of the ability scale. The poor readers in the 'sight' group were much worse off in reading ability. Not only were there nearly twice as many below average for their age group, i.e. below 9 sentences, there were ten who could not read even the first four very easy sentences. None of the 'phonic' children, however slow learners they were, were as poor as this. At the other end there were 35.6% of the phonic as compared with 19.7% of the sight children who read and understood all, or some of, the last five sentences, which were extremely difficult. It must be remembered that all these children were under eight years of age some under seven years.

As was to be expected, many children, who were in the experimental classes, left the schools before they had finished their infant school years. Of those who left before they reached the Schonell test stage, naturally no prediction about their reading ability can be made. But those who had taken their Schonell test before they left showed quite clearly, in that test, their degree of reading skill. In the 'sight' group, there were 30 such children and in the 'phonic' group 33. All the children except 2 in the sight group and 1 in the phonic group were under 7 years of age at the time they had the Schonell test. Children, who at this early age (under 7 years and the youngest only 5 years 4 months) can read more than the first 30 words in the Schonell word-graded vocabulary are in fact *reading beyond their capacity to comprehend meaning*. On the other hand, children who cannot read more than two words are virtually non-readers. Those who can read only up to 20 words are poor readers, of whom one cannot say for certain that they are well on the way to reading and would do well on the Standish test at the end of the infant years.

For those who read between 20 and 50 words on the Schonell list, it would I think, be safe to predict that they would probably not be below the average on the Standish test.

For the 63 children who left before, or were absent at the time of, the Standish test, here is the Schonell test result distribution:

No. of words					
group	under 11	under 21	under 31	over 30	total
sight	6	7	5	12	30
phonic	0	0	10	23	33

Here again the difference between the two groups is quite clear. All the phonic children showed clearly in this test that they would have had at least an average score in the Standish test and 2/3 of them would have been well above the average.

The case was not the same at all with the 30 sight children. 1/5 of them were unable to read, another 1/5 of them were poor readers, 1/5 average and 2/5 reading really fluently.

The same pattern shows clearly among the children who left, as is seen among those who took the Standish test and transferred to junior school. One could, with a fair probability of accuracy, place the 25 phonic children and 12 sight children in the top group of the Standish test results, i.e. 25-30 sentences. This places the same proportion of each group of children in that category, twice as many phonic children as sight children. While there is no poor reader in the phonic group there are 20% of the sight readers in the poor readers category and 20% not reading at all.

All the children who had scored less than 9 on the Standish test who moved into junior school where we could follow them in Sept. 1967, were retested in July 1968 at the same time as the last group of infants had theirs. There were 28 sight children and 15 phonic children in this group. The second test results for 7 of the sight children will be discussed later. For the other 21, the scores in the second test ranged from 11 to 26 correct sentences. For the 15 phonic children, the scores ranged from 16 to 26 correct answers.

Of the 18 children in the phonic group who moved into junior school before having either the Schonell or Standish tests, two went to a junior school where i.t.a. is not used, one is the very disturbed boy who is unable to do any school work. The other 15 had their Standish test at the end of their first junior year. Their scores were 8, 9, 9, 9, 11, 12, 12, 16, 16, 18, 19, 19, 19, 22 and 24. Of the four sight children who failed to reach the Schonell Test stage in the infant school and whom we were able to follow in junior school, one is too disturbed to learn anything and the other three were given the Standish test one year later, scoring 8, 9, and 17 respectively. One is discussed later on in a group of 7 whose test scores are examined. The other two were put on to phonic learning towards the end of their infant years because their teachers were very worried at their inability to learn words by sight.

At the end of the experiment, 358 phonic and 368 sight children finished their infant years in the experimental classes out of 400+ in each group at the beginning. Besides these there were 33 phonic and 30 sight children who left the schools before the Standish Comprehension Test, having however, taken the Schonell test.

It was therefore possible to assess their reading ability when they left. There were therefore 391 phonic and 398 sight children whose reading ability has been assessed. 324 of the phonic and 294 of the sight children had, at the age of under 8 years, reading ages above their own real ages. *For both groups, this is a considerably better achievement than is normally found using T.O.*

In the phonic group there were 49 children who scored below their real ages in the Standish test as well as the 18 who had not learnt sufficiently to reach the Schonell test at the end of their infant school; making a total of 67. In the sight group there were 104 such children.

What is surprising is not that the two groups of children were now closer to each other in reading ability, but that there should still be such a disparity between them. For the sight children had learnt their letter sounds during the six months before the Schonell test and had all the time between that test and the Standish test to continue practicing their word building. Both groups *had by now had exactly the same reading experiences*. The only difference lay in the timing and sequences of these experiences. The sight group had begun with whole word recognition and subsequently had had letter sounds taught them. The phonic children had begun with letter sounds and word building which had automatically led to sight recognition.

Assessment of Standish Test Results

Up to the time of the Standish Comprehension Test, the only ability which we had tested was the mechanics of reading. But, of course, the children had also been "reading for meaning" all along, even tho, at one point for the phonic children, the "meaning" was restricted to one word, a concrete noun. The Standish test was for understanding. As has been pointed out earlier, deciphering is a prerequisite for understanding; without any deciphering there is no understanding; difficult, hesitant, or false, deciphering makes understanding that much more difficult.

The Effect of Teaching Method on Comprehension

It is in the field of comprehension then that the second, but no less important, aspect of learning to read comes in. The sight children, because they began with Look-say learning, had continuous narrative from the very beginning. When letter sounds and word building were introduced for deciphering new unfamiliar words, the books they had to read now, being more advanced readers, were very complicated in their grammatical structure of sentences. The children had to cope with both difficult deciphering *and* difficult sentence structure, at the same time.

The phonic children had only to grasp the meaning of a concrete noun at the stage of letter sounds and monosyllabic word-building. This was why they found the majority of words in the Downing Readers so difficult to read at Test 1. The letters 'h-a-v' made the word 'have' but the children were not sure whether they had said the word correctly because alone it carried no meaning for them. Many children actually said, "I don't know what a 'have' (or 'is' or 'his' or 'eaten') is! What is it?" When the phonic children, having learnt their letters, were able to build and finally sight read most of their 42 nouns, they then had first short then long, single, illustrated sentences to read. In this way they were helped to learn and understand the abstract grammatical words of sentences. They also, unconsciously, built up a large sight vocabulary from the repeated building of unfamiliar words. When they felt able to go on to story books, they found they could start on quite advanced readers.

It was this gradual introduction to the complicated grammatical structure of continuous narrative which probably enabled so many more of the phonic children, to become so fluent in their reading and so quick at deciphering new words that they could read and understand the most complicated sentences in the Standish Test.

A quite unexpected confirmation of the benefit of graduated sentences, at the beginning of reading when word building is still necessary, came from a mistake made by two of the schools which opted for sight reading. The two head teachers, not having been specifically told *not* to use the sentence cards, bought them together with the letter and word-building cards for their experimental classes. In this way, the children in three classes (two in one school) virtually gave up book reading (by sight) when they started learning their letters. They went back to story books *after* they had learnt all their sentence cards. This was discovered through the fact that their Schonell test results, which came directly after the six months spent on this learning, were so significantly better than those of all the other nine sight reading classes that, out of curiosity, I enquired from the heads whether anything different had occurred in their schools, and specifically whether any material other than the

letter and word cards had been used. They naturally told me that they had used the sentence cards because they had thought these would be useful at the word building stage of learning. As indeed they proved to be.

An Interpretation of the Experimental Results

The majority of children in England do, in practice, finally learn to read. It might be argued that it does not matter if a child takes one or eight years to learn to read, as long as he or she can read by the time he or she leaves school at 15.

The absurdity of this argument is clearly visible if one takes the extreme end - if a child has failed to read effectively during its secondary schooling, it will have received in fact, almost no education. People seem to be less aware of the damage done to children if they fail to learn to read, say before nine years of age, and are therefore unable to use this most important tool for learning at second hand as well as very much aware of being failures.

What we appear to be quite unaware of is the damage that is done to children's self-confidence, interest in learning, and feelings of success when they are faced with demands from the adults which they can neither understand nor meet. This is the case with all children who find the very fine visual discrimination between word patterns impossible to recognize. In order to save ourselves from criticism of our method (and by implication of ourselves), we label these unfortunate children word-blind and send them to remedial clinics.

Because children want desperately to "do the right thing," they learn whole books off by memory in the belief that that is what reading consists of. There were 4 children who demonstrated this at the time of the Standish test. There were probably many others among the 41 who read less than 9 sentences who were of the same belief but did not express it in the experiment. What happens to those children when they are disillusioned? What effect does this discovery have on their personality? their confidence? their trust in adults to help them achieve all these difficult grownup skills?

In one school there were six children (out of a total of 20 in the experiment) who scored on the Standish test: 0, 2, 2, 4, 6, 8, respectively and one had not reached test 1 and so did not have the test. All 7 were retested a year later. The scores this time ranged from 6 to 17. But the curious fact about these scores lies in the distribution of the correct answers. All the children answered *all* the questions - that is they ringed what they held to be the correct missing word (or words) in all the 30 sentences. This in itself is curious, since all these children were still very poor readers. Out of all the 671 children who were tested, the only others who even attempted the last 10 sentences were those who had got all or almost all of the first 20 correct. But with these 7 this was not the case. They all gave from 1 to 5 incorrect answers to the first 8 very easy, simple sentences. The rest of their 'correct' answers were spread out over the next 22 sentences. Thus one child who apparently could not read "I see mother run" or "mother said goodbye to us" could read "The boy grew richer and richer until one day he was so rich that he became a farmer possessing his own farm, sheep and cattle." If I had given the children the test, I would have had each child separately, after the test, to find out more about his reading. Unfortunately, I did not give it and I was only sent the results with no comment from the head teacher. So it is anyone's guess what and how these children read. As far as intelligence is testable, six of the children were given the Creighton Vocabulary Test and the Raven's Matrices when they entered school. Two were in category I for both, two were in category II for both, two in category II for one and III for the other. That is to say, two were of superior intelligence, two just above average, two of average intelligence. The last child was not tested; he was the one who scored 17 on the Standish test and the only one who only got six wrong in the first 18 sentences. It is therefore reasonable to think that the children failed to read and consequently failed to understand. Yet all the children apparently read all the sentences, something none of the

other 664 children had even attempted to do, unless they were in fact reading fluently. The only conclusion one can draw from these results is that for these children *reading consists of guessing* and is meaningless, thus quite unrelated to speech, which is meaningful. For the phonic children, there was no possibility of illusion about reading. If they could not recognize and build with letter sounds, they simply did *not* begin learning to read. This was the case with the little girl who became reading ready two months after her seventh birthday. This is itself an index of slow development and it was not anticipated that she would then learn to read quickly. And she has learnt to read slowly but surely and what reading she now has is sound and sure. It is because the '*pretense*' of reading is ruled out with a phonic approach, that no child on this side of the experiment reached even the Schonell test, let alone the Standish test, without knowing clearly 'how' to read even if he or she still did it with difficulty.

It was also this factor of having to know consciously what to do in order to read a word, that is build letters or syllables, which prevented any child on the phonic side from getting anxious or worried and to despair. Those who understood, could do it. Those who did not understand were not expected to do it until they did understand.

Is Look-Say a good preparation for phonics?

For *all* the sight children, the preparatory work of sight reading 52 words, in the form of a story spread out in four readers, did not give them the expected 'insight' into reading even monosyllabic words, as was shown in the first test. Nor did it apparently help them in the least to learn letter sounds and build with them, as was clearly shown in the Schonell test, when they confused letter names with sounds of letters, and made wild guesses at visual patterns.

If the learning of letter sounds and word building comes *after* children have been taught by whole word sight recognition, they become confused or fail to learn the letters adequately. This was very clearly demonstrated by an incident in one school.

At the beginning of the Standish test in one of the schools doing both sides of the experiment, the two groups of children were tested together as the number in each was sufficiently small for it to be possible to have them in one classroom. It so happened that all these children had had three years in the infant school and all had transferred to T.O. some time before. The Standish test was, of course, in i.t.a. One of the sight children, on looking at the booklet said, "It's in i.t.a.-it's not fair, because we're on T.O. now and have forgotten i.t.a." Out of curiosity, I asked all the children, who thought they could remember their letter sounds, to put up their hands. About half the children did so and, on checking which group each belonged to, found they were all phonic children. I had a similar experience in another school a few days later with a sight group of children. Several children, as always happens, asked to have a word read to them. When they were told they had to read the words themselves, they said with pained surprise, "But I can't because I don't know it." This did not occur *once* with a phonic child, altho several asked the same question. It was sufficient to remind them to build. The Standish Comprehension test is a very difficult one for children as young as those at the end of their last infant year, between 6 years 11 months and 7 years 10 months. On account of this, many of the children require help in reading in the correct sequence, i.e. 'reading in' each missing word in the correct place. It was in the process of checking this that I discovered that the poor readers among the phonic children could read sentences they did not understand. The lack of understanding was probably due to the slowness of the reading, in many cases. But among many of the poor sight readers, it was their inability to read which prevented their comprehension. After the test, all the children who had read 8 or less sentences were 'retested' individually and all but six of the sight children found the missing word correctly for four sentences they could not read themselves. The 23 slow phonic readers each had the four sentences, beyond the one they stopped at, read to them. They did not choose the correct missing words, however, because they did not, in fact, understand the sentences.

The Slow Learner

378 sight children finished their infant school years in the experimental schools. 360 phonic children did the same. At the time the test was given there were 12 absentees in the sight group and 5 absentees in the phonic group. All the phonic children in this group of absentees had scored in the 30's and 40's on the Schonell test and five of the sight children had, so it can be assumed that all but the other 7 sight children would certainly have scored at least the average for their age on the Standish test. There were 18 children in the phonic group who, not having reached the Schonell test stage at the end of the infant school, did not take the Standish test at the correct time and are not included in the Standish test results. 32 children in the sight group were in the same position. These children, together with those who took the test but scored less than 9 correct sentences constitute the hard core of slow children. For the sight group, this total is 73 out of 378. For the phonic group, the total is 41 out of 360. Besides this there were 32 children on the phonic side and 22 children on the sight side who scored below average for their age on the Standish test. Here again, for the majority, the scores were so close to average for their age that one can group them among the slow average readers. It was unfortunate that one school, doing the Look-say side of the experiment with three classes (therefore with the largest number in this slow group, 24) had a junior school close at hand to which the children went, with which we had no contact. Therefore we were unable to follow the children into junior school. In three other schools, the same thing occurred. In the primary schools as well as in some junior schools cooperating closely with the infant school in which the experiment was being carried out, we have been able to follow the first groups of children who transferred in 1966 and 1967. We hope to continue following them and those who transfer this autumn. Of the 32 children on the sight side who went into junior school without having even had the Schonell test, 28 have disappeared. So it is impossible to know whether they have subsequently begun learning to read. The other four have been followed in the junior school. One scored 17 on the Standish test at the end of his first junior year; one scored 8 at the same time. This child was so slow in everything that she was queried for an E.S.N. school; one is a very disturbed boy, as is one on the phonic side who cannot concentrate on any work and is just seven. The last in this group is one of the 7 children out of a class of 20, who was tested for the first time at the end of his junior year. He, like the other six who were retested at that time, gave such answers to that questions that it was clear that he did not read, but guessed.

Of the 18 children in the phonic group, who went into junior school before even the Schonell test, all but two have been followed. The two who have disappeared had at least learnt their alphabet and could word-build and one had scored 47 out of 52 on the Downing vocabulary and 37 out of 42 on her phonic vocabulary in test 1 just before leaving for junior school.

15 have now taken their Standish test one year late, and one was absent at the time of the test. Their scores were 7, 8, 9, 9, 9, 11, 12, 12, 16, 16, 18, 19, 19, 22, 24. This includes the 9½ year old girl for whom the test was two years behind schedule (score 11) and the partially deaf girl who was then just under 9 years (scored 9 last year) who has taken the test a second time and scored 18. In a school where one girl went into junior school having only just taken test 1, she was given the Standish test at the end of her first year and scored 19. In a third school one boy was also just at the first test stage when he moved up. His Standish score at the end of his first junior year was 12. That leaves only one child, who is so disturbed that he, like his counterpart in one sight school, cannot concentrate on any work at all. It would appear from the reading ability of the slow children, as shown by their test results, that it follows the same pattern of development as that of the abler children. The sight children found it very difficult, in many cases impossible, to make any sense of reading, whereas the phonic children knew how to learn but were slow. It was also interesting that in the phonic group where the children had had their I.Q.'s taken, the slow readers were all children who *scored low on the I.Q. tests*. This was not the case with the sight children; there were 21 of these with *above average I.Q.'s*.

Dyslexia or Word Blindness

Dyslexia appears to be a handicap which only shows itself when children learn to read by sight before they have learnt letters and to word-build. Out of 398 children who began with sight reading and either finished infant school in the experimental class or left before then, already reading, there were 22 or 5.5% who failed to learn the 52 sight words. Of these 22, 12 were put onto the phonics method before they left the infant school. 4 of these children were followed into junior school where 3 of them had the Standish test one year later and scored 6, 8, and 17. The fourth is a very disturbed boy who has as yet done no school work. 8 others went into junior schools where they could not be followed; but 4 of them had taken the Standish test in the infant school and scored 9, 11, 12, and 18. The 4 others had only just started learning letters when they had to move.

Children who begin reading by learning letters and letter sounds show no wordblindness, but a minority are slow at gaining sight reading after wordbuilding.

Out of 391 children who were still in the infant school at the end of the experiment or who had left, already able to read, there was only one child who had not started reading because he was too disturbed. The oldest (and slowest) child in the experiment is now 9 years and 8 months. She and all the other children read, the majority fluently, a few still slowly.

What do these results indicate? The Look-Say beginners:

For those who failed even to memorize sufficiently well to deceive themselves and their teachers, there was simply *complete failure* to achieve any 'reading' even after a *two years' attempt*. In two of the schools the teachers were so concerned after one year of such failure that 7 children were transferred to the phonic approach.

In one school using two classes on the Look-say side, 4 children who had failed to learn their 52 words six months after they had succeeded in their reading readiness test, were put onto letter-sounds and wordbuilding six months before they left the infant school. One of these learnt so quickly that he was able to take the Standish test altho he was only 6 years 11 months, and he scored 12. The other three knew about half their letters and could build monosyllabic nouns when they left the infant school. A fifth child was put onto phonics early because he was making no progress at all with sight reading. He had one year on phonic reading, scored 36 on the Schonell test and 18 correct sentences on the Standish. Two children in another school who had three years in the infant school, had failed to learn their 52 words by the beginning of their third year and so were transferred to phonics. Unfortunately, one left the school soon after this, and has disappeared. He had, however, already learnt his letters and was able to wordbuild before he left. The other pupil took test 1 in his first junior year and at 7 years 11 months scored 17 in the Standish test, only 2 points below the average.

The results show very clearly how important it is to give young children the keys to analysis and synthesis of the visual patterns of writing in order to reconvert these into the familiar patterns of speech, which alone have meaning for children.

The irrational deviations of our traditional writing system began to impress themselves on us when we started to study children individually: and to apply psychological understanding to learning problems some 40 years ago. However, instead of getting rid of the irrationalities, by devising a more logical, systematic alphabet, we continue to accept the old one as the unalterable fate of all English speakers. We then tried to find a way of by-passing these irrationalities by teaching children to read as if the alphabet were of little or no use at all that is, by Look-and-say, as if English were a character language like Chinese.

Now that Sir James Pitman has removed the irregularities by providing us with a logical one letter-one sound alphabet, why cannot we return to a logical method of teaching reading-the most important basic skill needed for all later education?

Summary of Experimental Findings

Using the Initial Teaching Alphabet for teaching reading to 800 children during their infant school years, divided into two groupings of 400 each, the summary of findings is as follows:

1. Young children can learn 42 letters and their sounds and to build monosyllabic nouns meaningfully at a slightly younger age and in the same period of time as they can learn 52 words by sight.
2. The use of an enlarged alphabet with a one to one correspondence, each symbol having only one sound, does not of itself enable children to discover letter sounds for themselves. Children have to be taught to analyse and synthesise the sounds of spoken speech. With the i.t.a. they can then teach themselves to read.
3. Dyslexia or word blindness only appears when children begin learning to read with Look-say. 22 such children, i.e. 5.5% of the sample of the sight children showed this handicap. There was *no sign of this among the phonic children*. But a few showed difficulties in achieving sight reading after building words.
4. Children who spend many months learning by sight without any knowledge of the role of the alphabet, become very confused when they are instructed in the letter sounds and then taught word building after the initial sight reading.
5. The Comprehension test given at the end of the infant school showed that of the children who begun learning to read, 35.9% of the phonic group read fluently as compared with 19.9% of the sight group. There were 12.2% of the sight group who were poor readers as compared with 7% of the phonic group.
6. Teachers reported that the children enjoyed sound and word building games, and that phonic learning from the beginning gave them confidence and independence in teaching themselves.
7. If the transition to T.O. is left to the children to decide, it gives them no trouble at all. Children automatically transfer when they have reached fluent sight reading in i.t.a. They look at a book in T.O. and say delightedly, 'I can read this.'

N.B. There were 8 schools which did the sight side of the experiment. Of these, 3 accounted for 25 of the 32 children who failed even to reach the Schonell stage in the infant school. They accounted for 8 out of the 10 children who read less than 5 sentences in the Standish test. The staff of these three schools maintained at the end of the experiment that Look-say was still the best way of starting learning to read and that phonics were incidental in the learning process. In the other five schools, all the teachers involved were very much impressed with the importance of phonics when they began to introduce the children to the letters after Test 1, and did a great deal of sound and word building with the children. Two of the schools used the sentence cards to help children who were at the building stage. All five schools have now introduced phonics at the beginning of learning. **Is it mere chance that it was in the three schools where phonics was neglected that such a very high percentage of the failures were found?**

[Spelling Reform Anthology §9.4 pp140-142]
[Spelling Progress Bulletin Spring 1969 pp10-12]

How Phonemic is English Spelling, by Godfrey Dewey, Ed. D. *

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How phonemic is English spelling? For a variety of reasons, no simple direct answer to our question is possible, and statements which failed to define their terms clearly, are meaningless or misleading - usually both. First, therefore let us define our terms.

A completely phonemic spelling of English would have a 1 to 1 phoneme - grapheme correspondence; that is, only one grapheme for each phoneme and only one phoneme for each grapheme. Several symbols for one sound are an obstruction to *writing* (that is, spelling); several sounds for one syllable are an obstruction to *reading*. Both factors are present in our traditional orthography (T.O.) to a high degree. Thus, the current edition of *How we spell!*, [1] formally *English Heterography*, identifies in a single abridged dictionary, 530 spellings of 41 sounds, employing 273 different symbols, that is 12.9 graphemes per phoneme, 1.9 phonemes per grapheme.

Consider the principal factors involved in determining the degree to which English spelling is phonemic.

Measurement may be based on running words (connected matter, or weighted word frequency lists); on unweighted lists of frequent words; or on a dictionary. The first is the more important for the teaching of reading, especially where a phonemic initial teaching medium such as i.t.a. is involved; the second is more useful for the teaching of writing (more particularly, spelling); the third is least valuable except as a matter of linguistic research. The basis of any pronouncement should be clearly stated, always.

Whatever the corpus of the study, results may be stated in terms of the spelling of phonemes, of syllables, or of words. Again, the basis should be clearly stated. A measurement in terms of words will be more immediately intelligible to the average layman.

In addition to the foregoing, the number of phonemes distinguished will quite obviously affect any measurement. For the untrained ear of the general public, the most practical number is somewhere between 39 and 44, probably 41: the traditional 40 sounds of Pitman shorthand, commonly classed as 24 consonants, 12 vowels, and 4 diphthongs, plus schwa, as in the Simpler Spelling Association Phonemic Alphabet. The treatment of the weak, unstressed vowels, in particular, will markedly affect the statistical outcome.

As an example of the influence of the number of phonemes distinguished, Hanna [5] analyzed an unweighted list of some 17,000 frequent words on a 52-phoneme basis reduced from the 62 phonemes distinguished by Merriam-Webster's New Collegiate Dictionary (6th edition 1956) on which he relied. On that 52-phoneme basis, he found 334 different spellings, employing 170-odd different graphemes, or about 63% of the 530 spellings employing 273 different graphemes reported by *How we spell!*, as above. If, however, Hanna's results be restated on a 41-phoneme basis, his findings become only about 281 different spellings, employing substantially the same 170-odd graphemes, or only 53% of the dictionary basis total. My own study [2] of speech sounds (not spelling) analyzed its corpus of 100,000 words of diversified connected reading matter on the 48-phoneme basis of the Revised Scientific Alphabet (Key 1 of the Funk & Wagnall's Unabridged New Standard Dictionary), but reported most of its results on the 41-phoneme basis noted above.

Answers by others to our question, how phonemic (phonetic, regular) is English spelling, range all the way from Hotson, [7] "At present we use 500 symbols for 40 sounds, so that English is 8% phonetic," to Spaulding, [10] "If properly studied and taught, our language is, in fact, almost completely phonetic or regular," based on her statement that 94% of the most used 1,000 words may be spelled correctly by 70 phonograms, manipulated according to 26 rules! In between, Hanna, [6] in the most comprehensive and thoroly researched study to date, arbitrarily assumes 80% (that is, that a particular phoneme will correspond to a particular grapheme in 80% of the different words in which it occurs) as a *criterion* of consistent correspondence to the alphabetic principal; and his findings, in terms of phonemes, approximate that figure, *provided* that further factors such as the position of the phoneme in its syllable are taken into account. When, however, a computer was programmed with an algorithm or rule of procedure, based on the findings of that study, which manipulated 77 graphemes according to 203 rules, it was able to spell just under 50% of the investigated words correctly, and an additional 36% with only one error!

Most statements regarding the phonemic or non-phonemic character of English spelling are based, implicitly at least, on whole words (whether on a running word, word list, or dictionary basis), and usually evaded the phonemic issue by substituting the terms regular or irregular; words which, like charity, can be stretched to cover a multitude of sins. Thus, Laubach, [8] whose extraordinary achievements, "Each one teach one," in promoting literacy in over 300 languages thruout the world are well-known, employs for English a notation of 96 symbols [9] - actually, counting 4 recent additions and 18 doubled consonants, 118 symbols - several of them involving a diacritic, the macron; and describes as "regular" all spellings within the compass of that notation. Parenthetically, this method, which retains the precise T.O. forms of less than 50% of running words, has just achieved highly impressive results in teaching English to Chinese students in Hong Kong.

The farthest out example of such "regularity" is Wijk, [11] who, on the basis of an exhaustive and erudite examination of present-day English orthography, admits to his *Regularized English* 172 graphemes for 50 phonemes (actually 43 phonemes, since 7 are consonant clusters, not single sounds). Some of the graphemes are used for two or three different phonemes; many are supplemented by considerable lists of exceptions; and the problem of unstressed vowels and diphthongs is treated separately. The result is a notation, easy to read, of course, because it preserves so many of the familiar irregularities of T.O., but so complex to apply that it would take a linguistic Ph.D. with an encyclopedic memory to write it according to specifications. Nevertheless, on the basis that this notation preserves the T.O. forms of just over 70% of running words, Wijk implicitly finds T.O. to be 70% "regular."

So far as I am aware, there exist no dependable data on the relative frequency of occurrence of the different *spellings* of the phonemes of English *on a running words basis* - the basis which is most significant to reading, especially if a phonemic notation such as i.t.a. or World English Spelling (WES) is to be employed. I have in progress, however, a study of spellings, [4] to be completed, I hope, this year, based on the same 100,000 word corpus as my earlier study of speech sounds, [2] which will provide for the first time significant data in these terms, including the position of each spelling - initial, medial, final, or alone - in its syllable. When these data become available, the question, how phonemic is English spelling, may be answered *in terms of the occurrence of particular spellings of sounds in running words*, with some assurance. This, however, is an answer to only one facet of the problem.

Since T.O. provides a maximum of 26 letters (three of which - c, q, x - are redundant and contribute nothing to the problem) for a minimum of 39 phonemes, a phonemic standard by which to measure T.O must obviously, in addition to assigning one explicit phonemic value to each letter, supplement them by a sufficient number of equally explicit letter combinations. Substantially this is done by the

spelling reformed version of WES, which, for the basic 40 sounds, assigns a single phonemic value (the same values as in i.t.a.) to each of the 23 useful single letters, and assigns equally explicit phonemic values to 16 digraphs and one trigraph (the majority closely resembling the corresponding i.t.a. characters). To these WES adds 4 vowel-plus-r digraphs, to make the notation equally acceptable to r-keepers and r-droppers; and 2 consonant digraphs (wh for /hw/ and nk for /ngk/) for the sake of compatibility. The WES treatment of the weak unstressed vowels, usually schwa, by retaining in general, any single vowel of T.O., is one of its strongest features; for a specific character for schwa, if it could be made available, would change, unnecessarily, what might otherwise be the exact T.O. forms of perhaps 1 word in 6 on the printed page. This notation is near enough to a substantially phonemic basis to serve as an adequate standard of measurement for approximating an answer to our question, how phonemic is English spelling, by determining what proportion of the words, syllables, or phonemes of T.O. remain the same when transliterated into WES.

For such a qualified answer to our question, let us apply this standard to a significant word list, both unweighted and weighted, and to a representative selection of connected matter.

Table 3 of my study of speech sounds [3] lists 1027 particular words (as distinct from root words, Table 4) which occurred over 10 times in 100,000 words of well-diversified connected matter, representative of English as written and spoken today, and which made up 73,633 of the 100,000 words. Of these, the T.O. forms which are fully phonemic by our standard are:

Unweighted: 229 different words out of 1027 different words, or **22.3% phonemic**.

Weighted: 36,436 total words out of 78,633 total words, or **46.3% phonemic**.

Lincoln's Gettysburg Address, a masterpiece of English literature, which includes most of 41 phonemes in fairly typical proportions, contains (excluding the title) 267 words, 364 syllables, 958 phonemes (1,149 letters). By our standard, the words, syllables, or phonemes which are fully phonemic are:

106 total words out of 267, or **39.7% phonemic** - roughly 40%

173 syllables out of 364, or **47.5% phonemic** - roughly 50%

712 phonemes out of 958, or **74.3% phonemic** - roughly 75%

That is, 106 of the complete words, 173 of the syllables, or 712 of the phonemes were spelt uniformly, according to the WES symbols, exactly as if they would be if the whole selection were translated into WES.

The last figure, which will vary only slightly for longer specimens of connected matter, is probably the most significant single answer presently available, out of the various possible answers, to our original question: How phonemic is English spelling?

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[Spelling Reform Anthology §9.5 pp142-145]
 [Spelling Progress Bulletin Spring 1969 pp12-15]

How Nearly Phonetic is English Spelling? by Newell W. Tune

In the past, it has irked this writer to see several writers state unreservedly that everyone knows that our English spelling is 85% to 88% phonetic and yet offer no definite proof of the statement. This same statement has been repeated time and again by proponents of phonics for teaching Johnny to read. Yet these persuasive and highly articulate writers often do not bother to give proof. One of the early writers of this idea was Rudolph Flesch [1] who in *Why Johnny can't read* stated "All alphabetic systems are phonetic; the two words mean the same thing. The only trouble is that English is a little more irregular than other languages. How much more has been established by three or four independent researchers. They all come up with the same figures. About 13% of all English words are *partly* irregular in their spelling. The other 87% follow fixed rules." Flesch continued with: "Even the 13% are not unphonetic, as Dr. Witty calls it, but usually contain just one irregularly spelled vowel: *done* is pronounced "dun," *one* is pronounced "wun," *are* is pronounced "ar," and so on." Yet Flesch gives no definite reference to where he obtained this figure of 87%. On the other hand, Flesch does give a specific reference to Paul Witty, [2] wherein Witty is quoted as saying, "English is essentially an unphonetic language." (end of Flesch quote). Witty goes on to say, "It contains 26 letters, with which 44 sounds must be associated. Some letters, too, have no phonetic value. The child must read some letters which are absent and disregard some that are present. There are actually 144 ways of representing 13 vowel sounds. One vowel may have from 26 to 30 functions. Gates [4] stated English is phonetic only in accordance with a very complex scheme." (end of Witty quote). Gates [5] also says, "Since English is so unphonetic, the most reliable device for determining which of the many sound-to-letters translations is the correct one is to be able to recall some impression of the visual appearance of the word. This, I believe, is the method adopted by the deaf." And Gates "found that children try to spell extensively by phonetic translation and that a child can use phonetic translation and still be a poor speller." (of English) Also Gates [6] was quoted by Witty, "Gates' study of the phonetic elements of his primary Reading List showing the unphonemic character of the English language even for primary grades, led him to still further doubt the value of *unguided* phonetic generalization."

Is it not surprising, therefore to find remedial methods burdened with phonics? Despite the rather decisive investigations disproving the value of extreme approaches, advocates still maintain that phonetic training confers the unquestioned ability to unlock new words and to pronounce and spell words correctly. In fact, several educators believe that extreme phonetic analysis is essential in the re-education of the poor reader.

This extreme emphasis has had most unfortunate results. It has caused remedial reading to become highly formalized, concentrated largely upon the development of certain specific skills. Since we have seen that serious retardation is associated with numerous and complex forms of behavior, it is

clear that such an approach neglects or diverts attention from many really significant factors associated with maladjustment. Poor reading is frequently but one symptom of a basic inadequacy. Inadequate speaking vocabulary is another symptom often found in the culturally disadvantaged child. For how can a child understand words and things not in his world of acquaintance? Moreover, most remedial drills are unfortunate in that they overlook the child's primary purposes in reading silently; to *obtain meaning* from the printed words - to obtain desired or needed information, or to follow happily a worthy recreational pursuit.

Indeed, if English actually were phonetically spelt, phonics would then be a reliable means of unlocking the sound of any new or unfamiliar word encountered. And if English were 87% phonetic as claimed, this phonic method would usually be most successful. But the fact is that such a generality is not reliable when you need it most. The anomalies of English spelling are found most frequently among the commonest, most frequently used words. Ina C. Sartorius [3] explored the usefulness of 38 rules for teaching spelling. She says on page 48, "Inspection of Table XXIX reveals a number of interesting facts. Rules I, IX, and XV have a high percentage of exceptions, while Rule XXVIII has more exceptions than it has regular derivatives (conformals). 13 rules have no exceptions. Of these 13, only Rule XXIV governs more than 50 words, or to be exact, this rule affects only 1.3% of the entire list. Although these 13 rules are consistent, their frequency is certainly low.... Many of the rules as stated are confusing and are parts of more general rules - and are made to avoid exceptions to the general rule. 13 of the 27 rules analyzed deal with learning to spell derived words."

Let us look at Rule XXVIII - words of one syllable having the long sound of the vowel usually end in silent e. Of the 1000 commonest words, "there are 248 words which consistently follow this rule, and 339 exceptions to the rule (leaving 213 words not applicable). There are 79 words which end in final e but do not have the long sound of the vowel. Also 260 one-syllable words do not end in e and yet have the long sound of the vowel. Examples of these last words are: *reach, reel, read, reed, rain, road, sail, bow, say, seat, sight, sleep, spear, stain.*

It must be confusing to the child to try to distinguish which of the vowels carries the long sound of the words that do end in silent e and seem to fit the rule, such as: *seize, seige, cease, and league.* For instance, the first two words might just as consistently have the long-i sound, while the last two words might just as consistently have the long-a sound." She could have added such words as: *eight, height, heinous, either, eider, sieve.*

"Writers of textbooks in spelling have certainly tried to help children generalize on the final e. Still, the most common error found in the study of errors was the adding of a final e to a word or to any syllable of a word. This error appeared 298 times out of a possible 4,091 times, and 'omitting' the final e appeared 151 times. Rules on final e either are not being adequately taught or are not functioning."

"Rule IX-I before e except after c or when sounded as a, as in *neighbor* and *weigh.*

In order to study this rule, it was necessary to count both *ie* and *ei*. Therefore, the total number of words governed by this rule is 131,101 words containing *ie* and 30 containing *ei*. Table XV gives the grade placement of both *ie* and *ei*, 13 of the words having *ei* have the sound of a, and 8 of the *ei* conform to the e after c, therefore, there are 9 exceptions to the rule from the standpoint of *ei*. These exceptions are: *being, seeing, either, neither, foreign, foreigner, height, seize, leisure.* Furthermore, there are 8 exceptions in the *ie* words where *i* follows *c*: as, *society, science, vacancies, ancient, conscience, efficiency, sufficient, and conscientious.*

"Counting the 13 words that sound like a and thinking only in terms of visual appearance, there are 30 words out of 131 that do not conform to the rule."

Dolores Durkin [7] admits that "these kind of inconsistencies, plus the frequency with which they occur, have led linguists to conclude that of all the great languages in the world, English is the most erratic from a phonetic point of view. But this comes as no surprise to teachers."

Arthur W. Heilman [8] conforms this with, "One factor which limits the efficiency of phonic analysis in learning to read English is the fact that the pronunciation of English words does not follow any consistent patterns. Although English is an alphabetic language in its written form, it is also one of the least phonetically lawful. That is, there is nothing like a one-to-one relationship between letter spellings and letter sounds in English."

Gertrude Hildreth [9] says, "English is a cumbersome vehicle in its printed form, the most inconsistent of the phonetic languages. One cannot depend upon the spelling as a guide to the pronunciation of English words; the pronunciation has to be learned along with the form and meaning. Altho English is, strictly speaking, a phonetic language, of the 350 commonest words that children use, fewer than 200 can be written as they sound." (56%). Then on page 153, "It is estimated that 2/3 of the 600,000 words in an unabridged dictionary contain silent letters - that is, letters not pronounced or letters and letter combinations not distinctly heard: all but four letters, *j*, *g*, *v*, & *x* are silent in some words." And Hildreth [10] says: English spelling is entirely arbitrary. It frequently follows no systematic patterns. Efforts to simplify our irrational spelling have met with scant success. A large number of words are spelled in two or more ways. Furthermore, English spelling is largely non-phonetic in character."

Why then do remedial reading teachers continue to claim that phonics is a *reliable* means for children to unlock the pronunciation of any new words he encounters?

In searching for the origin and originator of this oft-repeated quote - and usually misquoted - we found in the book by Julie Hay and Charles Wingo, "The authors' studies reveal, also, that our language is not purely phonetic. 13% of all English *syllables* are not phonetic. 87% of all syllables in our language *are purely phonetic* (italics are ours) and the words in which unphonetic syllables occur are in part phonetic. Knowing the phonetic facts about our language, therefore, provides the tool with which pupils may recognize instantly nearly all of our English words." They give the following digraphs as being phonetic - *ai*, *ay*, *ea*, *ee*, *ie*, *oa*, *oe*, *ow* (grow), *ue*, *ew*, *oo* (moon), *oo* (look), *au*, *aw*, *oi*, *oy*, *ou*, *ow* (cow). There is no specific reference to the authors' studies, nor when or by whom it was published. We are supposed to take it at face value without any questioning. There is no explanation of what constitutes a phonetic word. Nor on what this figure was based - on all the words in the dictionary, or on running text. Can it be that this is the source of the oft-repeated quote?

Further research turns up an earlier predecessor, E.D. Burbank, [12] writing in the Volta Review for March, 1920. This gives the exactly same paragraph above quoted by Flesch about "dun" being a perfectly phonetic word. On the next page, Burbank gives his definition of a phonetic word, "A word may be considered phonetic when there is something in the word that tells its pronunciation and when it contains nothing that misleads in the pronunciation * - that is, when the spelling reveals the pronunciation.** To illustrate; *can* is phonetic because each letter has its usual sound; *cane* is phonetic because the final *e* shows that *a* is long; *car* is phonetic because *r* shows that *a* has the so-called Italian sound; *call* is phonetic because the *ll* shows that *a* has the sound of *au* in *haul* or *aw* in *law* or *bawl*, which is the same as *o* in *corn*; and *rage* is phonetic because the final *e* shows that *a* is long and *g* soft."!!!! (explanation marks are ours) He goes on to say, "What is the proportion of phonetic words and syllables in English? There is a very general misapprehension on this point. It

is, easy to find inconsistencies in English spelling,.... But, as a matter of fact, out of every seven syllables, six are like *dun* and only one is like *done*. An overwhelming majority of the words and syllables in English are phonetic." "In English there are about 3,381 monosyllables. (see note no. 3) Of these, 297 or 8.8% are unphonetic, like *gone, said, have, love*; 145 or 4.4% are analogical like *gold, child, bread, find*; 2,939 or 86.9% are phonetic like *mat, sit, cot, set*. These 2,939 words offer little or no difficulty in word recognition to pupils who know the sounds of the letters, the way to blend these sounds, and a few phonetic facts." He then refers to W. Franklin Jones [13] The 2,396 words on the Jones list covering the vocabulary of children in the first three grades have been studied and in these words there are 3,405 syllables. 463 or 13.5% of these syllables are unphonetic. From this study it appears that the % of phonetic syllables in polysyllabic words is almost exactly the same as the % of phonetic words among monosyllables: Willis L.Uhl [14] does not quite agree with this. He quotes Burbank with somewhat different figures, "Of the 2,939 phonetic monosyllable words, 1,238 or 42.1% can be pronounced as soon as 30 consonant and vowel sounds are mastered. That is there are 25 consonant sounds in English. When there are added to these 25 consonant sounds, the short vowel sounds of the 5 vowels, 1,238 words can be pronounced."

Another researcher, Patrick J. Groff, [15] asked "The New Iowa Spelling Scale - How phonetic is it? The purpose of this study was to determine (a) the proportion of the words in the scale that are not spelled entirely phonetically; (b) the proportion of the letters in these words that are not phonetic, or regularly sounded; (c) the spelling difficulties sixth graders have with words that are not spelled entirely phonetically, hereafter referred to as non-phonetic words."

"The New Iowa Spelling Scale is made up 'of a scientifically selected list of 5507 words of high social usefulness.' Investigations have shown the words to be among those most commonly used by adults and children in written communication."

"The original sample for my study included every 5th word of the 5,507 words of the scale. This sample totaled 1,101 words. The sample was then expanded by 550 words to a total of 1,651 words, or 30% of the scale.

"A specially prepared guide was used to decide whether the letters in a word represented phonetic spelling. All variant sounds of vowels were considered phonetic spellings. For example, the a's in *fate, chaotic, care, add, account, arm, ask, sofa, and baby* were all considered phonetic. The following were also considered as phonetic spellings: *g* as in *girl* and in *judge*, *c* as in *cent* and *cold*, *oo* as in *food* and *foot*, *oi* as in *oil*, *ou* as in *out*, *th* as in *thin* and *then*, *ch* as in *chair*, *sh* as in *she*, *ng* as in *ring*." Your attention should be called to the fact that a truly phonetic spelling does not allow a letter or digraph to represent two different sounds, hence with this elastic measuring device we should get a lot more phonetic spellings than with a truly phonetic spelling.

Table 1

% of non-phonetic words and letters in two samples from the New Iowa Spelling Scale.

	sample	total	number	non-phonetic %
<i>words:</i>				
	original	1,101	826	75.0
	expanded	1,651	1,230	74.5
<i>letters:</i>				
	original	7,270	1,369	18.8
	expanded	10,847	2,047	18.9

As Table I shows, about three out of every four words in the New Iowa Spelling Scale *are not spelled entirely phonetically*. However, less than one of every five letters in these words is non-phonetic. (by his elastic scale)

"Table 2 does not substantiate the assumption that a small % of sixth-graders spell non-phonetic words correctly. It shows quite the opposite. Of the non-phonetic words in the sample, 62.5% were spelled correctly by more than half of the sixth-graders. The remainder of the non-phonetic words in the sample, 37.5%, were spelled correctly by less than half of the sixth-graders." (is this supposed to be good?)

In the light of this later work, before we can accept the evidence from Jones and Burbank as being reliable, we must first examine carefully his definition of a phonetic word. According to Burbank, to be phonetic a sound need not be spelled in only one way - merely that something in the word indicates the sound no matter how artificial or complicated the rule for its use. With this elastic ruler or measuring device, one could prove that all men are the same height. They are all reasonably (?) tall (or phonetic). It is now apparent that these investigators stretch their definition to make it fit what they wanted to prove. To refer to Alice in Wonderland, "A word means exactly what I want it to mean."

Now let us see what more up-to-date phonetic experts give as a definition of phonetic words. Dolores Durkin [7] says, "Ideally, at least for purposes of phonics, each symbol or letter in our writing system would represent one speech sound and, in turn, every separate sound would have a single representative symbol. Unfortunately for those learning to read or spell English, this is not the case. Instead, the same sound is represented different words, as in *her, first, word, fur, journey,* and *colonel*. In other instances the same letter, or combination of letters, represents a variety of sounds; for example, the *ea* combination in *clean, bread, break,* and *hearth*. In addition, letters sometimes appear in words but no sounds occur, as in *debt, have,* and *gnat*."

The Ransom House Unabridged Dictionary [16] gives, *phonetic alphabet* - an alphabet containing a separate character for each distinguishable speech sound. *Phoneme(s)* - the basic units of sound by which morphemes, words, and sentences are represented. They are arrived at by determining which differences in sound function to indicate a difference in meaning."

Webster's Collegiate Dictionary [17] gives, *phonetic*: 2. Representing sounds, esp. speech sounds; as *phonetic symbols*; specif., made according to or designating a system of spelling in which each letter represents always the same speech sound."

Yet the earlier writers either disregarded these definitions or were woefully ignorant of the dictionary meaning. What they called phonetic was not even the most regular spelling. Which is the most regular of the two oo- or th-spellings? Both cannot be equally regular, since then there is no discrimination between two different sounds. Yet they accepted both. In the case of *tion* and *cion*, while the former may be considered the most usual spelling, it could not by any stretch of the imagination be considered a phonetic spelling, i.e., one in which each letter or letter combination always represents the same sound. Yet if only reliability were considered, it would have to be accepted as a regular means of indicating the /shun/ sound. As for the rule for vowel digraphs, "When two vowels are together, the long sound of the first is heard and the second is usually silent," Theodore Clymer [18] found that this rule has 377 exceptions to 309 conformals, hence is misleading 55% of the time. He then concludes, "If we adhere to the criteria set up at the beginning of the study, of the 45 generalizations, only 18 are useful.... It seems quite clear that many phonic generalizations which are commonly taught, are of limited value. Certainly the study indicates that we should give careful attention to pointing out the many exceptions to most of the generalizations

that we teach. Current 'extrinsic' phonics programs which present large numbers of generalizations are open to question on the basis of this study."

In another article on the same subject in this issue of the SPB, data is offered to show how phonemic English spelling is on the basis of words, syllables and phonemes. Now all three of these bases cannot be equally valid to judge English, therefore only one should be considered as the valid basis. Probably not more than one person in a hundred knows how many and what are the phonemes of English. We do not speak, write or think in separate phonemes. In fact, most of the consonant phonemes and some of the vowel phonemes either cannot or can only with difficulty, be pronounced in isolation. Therefore the phoneme is not a satisfactory basis for evaluating the phoneticness of English spelling. While syllables can be pronounced, and some teachers do encourage pupils to speak and think in syllables, these are not usually meaningful units of speech. Therefore, while academically interesting, they are not a practical basis for comparison. The whole word then is the only logical basis for a valid evaluation of the phoneticness of English. On that basis English is somewhere between 2/9 and 2/5 phonetic in reading matter in running text. The most unfortunate aspect of these figures is that of the 200 commonest words [19] occurring in running text, 107 are not phonetic or regular by any commonly taught rules and another 36 are only regular by the assistance of the silent terminal e rule, the doubled consonant rule and the vowel before r rule, all of which are of questionable value. That makes about 3/4 of these words irregular and difficult to teach.

When are our parents and teachers going to rise up en masse and rebel against the unreliable English spelling and petition their Congressman to simplify our spelling?

*Yet he completely disregards this in the examples he gives.

**This allows silent letters and several symbols for the same sound.

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[Spelling Progress Bulletin Spring 1969 pp15-17]

Ye Very Peculiar Y (The Veri Pecyulyar Wi), by Lewis H. Boyle

"I am exceedingly joyful in all our tribulations!" *Paul*, in II Corinthians, 7:4

The Roman governor Festus told Paul, "Much learning doth make thee mad," but the apostle denied that. Acts 26:24-25.

We are all more joyful in play, the arts, study or work if we have suffered some tribulation, provided we win; there is little joy in playing solitaire. A gambler said that he preferred losing bets to being bored; but it is not joyful when you are both bored and a loser.

St. Paul was a winner, being most persuasive in Greek, Hebrew and Latin. Besides his other gifts, he must have had a prodigious memory, even for matter that was disarranged and inconsistent.

Your humble servant, lacking that gift, gained the unique distinction of flunking first year Greek in two centuries, in the last year of the 19th and the first year of the 20th. He was wrecked in the endless accident of Greek grammar that was perpetuated by leisure class scholars of Athens. Those who are shipwrecked should best know the Terrors of the Sea. (The alphabet and spelling of Greek is good, being created by more practical people.)

That failure meant taking both French and German, and both the accident and the spelling of French brought joyless tribulation.

But we are here concerned with the English language. It is a composite, being formed from other tongues and influenced greatly by other nations, so they all must be considered. The Normans of France conquered England and tried to suppress the English language, making it unlawful to write in English. The Britons thereby became illiterate, and in that condition they vastly simplified their grammar; they practically abolished the declension of adjectives, which was useless "boondoggling," and greatly reduced that of nouns and the conjugation of verbs.

During that tyrannical subjugation the French scholars "played Whaley" with English spelling, making it very difficult to read. They changed Anglo-Saxon *cwic* to *quick*, using three different consonants in the same word for the same sound. They used *y* and *i* mainly for vowel *i* sounds, depending upon their positions in words, and not at all upon the pronunciation, so it became a game of hide and seek. It was not an accidental change, but done according to some rules, and therefore in collusion and premeditated. The "y" is "forked" and the word *y* means a place for turning about. That letter *y* is used in a few words for the consonant by that name, but in very many more for vowel sounds, most of them related to *i*. We will first study the consonant to understand that relation.

The consonant *y*, like *w* and possibly *r*, is a glide, and to enunciate it we move the oral members to their positions for the vowel sound which must always follow in the same syllable. For *y*, this speaker starts with them in the positions for short *i*, with the tongue tip to the front, and the lips and

teeth not far apart. It is awkward to bring these members back to the same positions, as in *yip*, so we have few words with *y* before short *i*; or likewise *w* before long *u*, or *r* before broad *u*.

Y is also called a semi-vowel, along with *w* and *h*, and *r* in the speech of some folks. *Y*, *w* and *b* are distinct consonants only when placed before the vowel in the syllable; otherwise those letters are used for other purposes; *y* is the only one which by itself is clearly and frequently used as a vowel.

Our alphabet comes mainly from Latin, its capitals being unchanged. But in classical Latin, *y*, and also *k*, *j*, *u*, *w*, and *z*, were rarely used, if at all. Pilate wrote *Iesus* and *Iudaeorum* in the superscription which is still abbreviated in INRI, and was then pronounced *y*, not /j/ until later.

In many words from Latin and some other sources, we have *i* pronounced *y*, often after *l* or *n* and followed by an accented vowel in the same syllable, which is usually final, as in: *dahlia*, *collier*, *William*, *bilious*, *Julius*, *onion*, *spaniel*, *opinion*, *genius*, *menial*, *junior*; also *savior*, *vizier*. In casual speech, syllables may be run together to give *y* in these: *champion*, *dubious*, *premium*, *lineal*, *ammonia*, *miniature*, *indian*. Colloquially, *d* in *indian* goes into the last syllable to result in *injun*; we also have *yu* in *credulity* and *ju* in *credulous*.

In *family*, *familiarize*, we have four entirely different *i* or *y* sounds which can in English be spelled with either letter: in the noun they are the schwa and the unaccented *e* or *i* sound; in the verb they are the accented short *i*, the consonant *y*, and the long *i*.

In many words from Latin, Anglo-Saxon and some other sources, long *u*, spelled without any *o*, takes the *yu* sound in some positions, varying in the speech of different areas; hereabouts we hear it when it begins a syllable or follows certain consonant sounds, as in these: *unit*, *use*, *ewe*, *beauty*, *cute*, *adieu*, *few*, *new*, *argue*, *Hugh*, *askew*, *mute*, *nuisance*, *puisne*, *queue*, *tubular*, *Tuesday*, *view*. It is not usual after *l*, *r*, *w*, *th*, *s*, *z*, *sb*, *ch* or *j*. Webster-Merriam recommends a wider use of the *yu* sound, while many speakers, especially those of foreign parentage, use it much less. The pronunciation might be more uniform if it were stressed in schools. Television and travel do tend to discourage localisms.

In words from Greek that *yu* sound is spelled *eu*, as in *eulogy* and *pneumonia*, but not in *pleurisy*, after an *l*. In words from Germanic tongues, Hebrew and others, *y* may be spelled *j*, which would seem more appropriate as a substitute for *i*: *Sonja*, *fjord*, *Jussi*, *Bjorling*, *Junker*, *Hallelujah*, *Jugo-Slav*. In Spanish it is double *l* in *ocotillo* and *La Jolla*. *Ny* is spelled *ñ*, in Spanish *piñon*, and *gn* in *poignant* and *lorgnette* from French. *Ly* is spelled *gli* in *seraglio*.

The French and English scholars changed *g* or *f* in Anglo-Saxon and other Germanic words to *y* when initial in 50 or more familiar words: *yard*, *yawn*, *yea*, *yes*, *yield*, *yoke*, *youth*, *young*. It is rare before short *i* or the letter *u*. The spelling is retained in compounds when medial: *barnyard*.

The spelling of the consonant *y* thus varies greatly in words from different areas and eras but in any group or situation it is reasonably consistent and unchanging; there are not so many words with the consonant *y* sound and with the same spelling, and each group could be taught about as easily as the reading of numbers; it should cause little tribulation. (In spelling class, Johnny is not taught to "touch all bases," or get to first base, but his mind is encouraged to wander and stray.)

It is a different story with *y* used as a vowel. In Walker's Rhyming Dictionary, over 1/7th of the words listed end with *y*, which could not possibly represent the consonant *y*. That is far more than end with any letter that is sounded, altho there are more that end with silent *e*.

The change to *y* from *i*, *ia*, *us*, *as*, etc. in the endings seem to have been done for no known reason, and by a class of people who had forbidden the Britons to write in their own language, and later started many senseless and distressing fashions and practices, some of which, like bustles, women have had the spunk and gumption to junk; they have been called invidious, wasteful, pretentious, etc.

We do not know where they got the idea of final *y*, for *y* was little used in western Europe; and the Greek upsilon *υ*, from which we get it, did not end words.

It was true that we needed more letters in our alphabet to use for our many sounds, but *y* was used for none that *i* was not used for, and continued to be so used. Consider the uses of *y* and *i* in *very*, *verity*, *verify* and *verifiable*.

The unaccented *y* is extremely common, and the experts cannot agree whether the sound is short *i* or *e*, so changing all that spelling would be extremely difficult. Rather few of our words end with the sound of long *i* and that could conceivably be changed; if not, they could be taught in a few lessons, many of them being verbs.

Some school spellers give more rules for the jugglery of *i* and *y* than for any other letters, as in *silly*, *silliness*, and *cry*, *cried*, *crying*; some of the changes decreed make the spelling more ambiguous: we have final *oy* in *coy*, but it is *oi* in *coin*, which could be read in different ways, as in *coincide*; and in *boyish* the *y* could logically be pronounced as a consonant.

In that game of hide and seek there are some rigid rules which apply to the use of *i* in our Saxon or Anglicized words:

The letter *i* is neither final nor doubled, though that is done without damage in unchanged words from Latin, like *bacilli* and *genii*, and from other sources. (That rule also holds good for *u*, and the spelling of other vowel sounds when final is usually unphonetic or in disarray.) *Y* commonly replaces *i* at the end of words, or parts of compounds, but is avoided when medial.

Yet medial *y* is favored, if not affected in our surnames: *Haynes*, *Seymour*, *Hyde*, *Sykes*, *Wynn*, *Boyd*, *Doyle*, *Schuyler*. The above practices were initiated in medieval times and apply mostly to familiar words which most folks finally learn to read, if not spell, after much tribulation.

We have innumerable words of learning from Greek which have been introduced in modern times and they are still coming. In them *y* is commonly used when medial as well as final, but its use is inconsistent, if not irrational, making words very hard to read and spell.

In the Greek alphabet there were five short vowels, two long ones, and seven digraphs which regularly indicated long vowels or diphthongs. That wonderful arrangement was devised by the industrious commercial Greeks of Asia Minor who arranged and labled their goods, as sensible people still do. They also had three accent marks, so that long, short and unaccented vowels were distinguished, and proper speech had cadence and beauty.

The scholars who wrote out words from Greek into English showed no concern whatever for speech sounds in either Greek or English. They used *i* for any *i*-sound if the Greek spelling was iota, though that letter was not used singly in Greek for long-*i*. They used *y* in the middle of words for any *i*-sound when the spelling was upsilon in Greek, and at the end of them when the spelling was iota alpha.

Thus in PHYS-i-OL'o-gy we get the first *y* from Greek upsilon, the *i* from iota, and the final *y* from iota alpha. Only the very few persons who have mastered Greek could determine how to spell such words. Thorstein Veblen in his *Theory of the Leisure Class* called that sort of thing "futile classicism." That also is what makes German and French spelling hard to learn, but not Italian, nor Spanish with its *fisiologia*.

Fortunately in most English words from the classics there is some consistency in spelling and some pretty good rules can be given for reading them: *ch* is pronounced *k*, and *ph* is used consistently for *f*; there are few vowel digraphs, and accented vowels are usually pronounced as spelled; accented short vowels never end their syllables, while long ones never do so except when followed by one consonant and silent *e*. But too many words are not from classical Greek and Latin-and violate these rules.

In order to be easily understandable, we here use the syllable mark for the primary accent when there are two strong syllables; and capitals are used for all stressed syllables - small letters for silent or unaccented letters.

Y with *i*-sounds in words from Greek:

Long *i*: CY'a-NIDe, de-HY'DRATe, PROS'e-LYTe, PROPH'e-SY.

Short *i*: CYL-in-der, PHYS-ics, DAC-TYL'ic, DYS'enTER-y.

Unaccented *i*: phy-SIC-ian, DAC-tyl, EM-bry-o, LAR-ynx.

Obscure *i* medial: LAB-y-rinth, LAC-ry-mal, DI-AL'y-sis.

We suggest the use of a system like this when strange words from Latin or Greek are first presented in the text. It may be harder to determine the pronunciation than the meaning of some words like that, because of changing accents and vowel sounds, if they are printed conventionally.

There is much interest in helping beginners, for they encounter much inconsistent spelling. In using the Pitman Initial Teaching Alphabet some pupils may have trouble learning the strange symbols, and forgetting the changed spelling when the traditional kind must be used. It might help them to use some combinations of capital and small letters without respelling, as in:

WHEY, MEaL, THIS, ThIN, CHURCH, THOU, BOUgh, KEy, BREaD, SOuL, ChROME,
THOUgh, GeYser, YoU, STeAK, ThOMas, cHEF, RoUGH.

The innumerable digraphs in English are heartbreaks. It is hard to do anything with them, but yet we cannot do without them. It seems ironic that so many of them should be used for long *e*, which is a pure single sound, while long *i* and *o*, which are commonly called diphthongs are very often spelled with only one letter.

The letter *o* with no other vowel letter is commonly used for a dozen different sounds, as in: *old*, *hot*, *dog* or *gone*, *for*, *obey*, *bacon*, *do* or *move*, *wolf*, *son* or *some*, *worm*, *actor*, *choir* (*w*).

It would help if we had a second letter for *o*, as the Greeks did, and we could nicely use our character ~ for zero, with little change in size or form.

But judging by our experience through the centuries with *y*, and also *j*, *k*, *u*, *w*, and *z*, we would use the new letter for different sounds in some positions in some words derived from some sources and not others. In fact, we have *u* sounds in 8 of the 15 words just listed, but the spelling has been *o* for a very long time.

So long as our spelling remains unsimplified, it is very likely that English words must be continued to be taught one by one, or by retail, rather than being taught by the wholesale manner, as our numbering system is.

The retail trade should not be belittled. What is more enticing, popular and satisfying, and less criticized than a department store or super market. They are as well organized as possible and as modern as this morning's milk. You can quickly find and recognize what ever you might want - with the least amount of confusion. Everything is logically arranged. In a neighborhood store you will find the sugar, salt, or detergent properly packaged, labled and on their proper shelves. Vegetables and fruits together but separated. Each type of things sold are where you would logically expect to find them.

Why cannot words be presented in spellers as intelligently as that? In a typical spelling column we find the words: *trip, before, glass* and *use*, in that order. Isn't that like the nest of a pack-rat with some cactus, animal excrement, and the camper's money and watch? And doesn't it waste the taxpayer's money and drive the students to distraction?

These are harsh things to say, but they are hard facts and we had better face them. Educators are very backward and slow to accept progress.

English words can be just as attractive as fine fruit, even with our seemingly crazy spelling, and if they were arranged in spellers according to spelling groups and like pronunciations, Johnny could read them like "greased lightning." For instance: *arrange, change, mange, strange*, etc. on one list, and *flange, orange*, on another nearby. That should all be mastered in one lesson and the student would feel the joy of accomplishment and triumph, rather than the endless frustration, tribulation and confusion.

If people were taught all our speech sounds and realized the many ways in which they are spelt, they should be anxious and better prepared to accept an improved, simplified spelling.

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[Spelling Progress Bulletin Spring 1969 pp17-19]

Book Review

How They Murdered the Second R, by George Riemer*

*Brooklyn Heights, N.Y.

Reviewed and condensed by Newell W. Tune

Pub. by W.W. Norton, New York & Toronto, 1969. 322 pp. \$7.95

This book will open the eyes of some educators (those who have an open mind) to a much neglected phase of the education of our young children. George Riemer is to be commended for calling our attention - in a very dramatic and forceful manner - to the sad state of lack of emphasis on our Second R. Some quotes from the book are liable to go down in history as axioms never to be forgotten. **"Nobody remembers a nation for its readers. A nation will be remembered in time not by its listeners, but by its speakers. A nation makes its own original mark in history not through its readers but through its writers."** Everybody remembers Patrick Henry's speech, or knows of it, but who knows who his listeners were?

A century ago the Second R was considered an equal partner among the Three R's. Today its neglect is shown by the proportion of articles written about it in comparison with those written about reading. In the *Readers' Guide to Periodical Literature, Education Index*, in the period from July, 1938 to June, 1963, there were 30 columns on reading to 7 columns on English composition. In the Teachers College, in the file of doctoral theses for 1952-57 there were 39 devoted to reading and only 4 on writing compositions. Several other comparisons were made. It suffices to show that the educational establishment has over exaggerated the importance of reading at the expense of writing. "Two false attitudes dominate our educational, system: 1. Reading is *the* key to all later learning; 2. Writing is a special art, a talent possessed by a gifted few. The uneven push exerted by these two notions distorts our entire educational plan. Its immediate effect is to warp reading and writing away from each other. Reading gets prime instruction time and attention, starting in kindergarten. Spelling instruction begins in second grade, two years later. Teachers are trained to teach reading; they are not taught to write or trained to teach writing."

The inability of most adults today to express themselves as volubly in writing as they do in speech is far more serious than most people realize. "There is no profession, no business, no government office, no industry, no service, no art in the United States in which communication is not expensively, frustratingly clogged by bad writing. It is the position of this book that the sources of bad writing must not be sought in Graduate school, college, or high school but in elementary school, where writing instruction is supposed to begin. American adults don't write because they are the victims of a system intensely determined to make them readers, not writers, and because there is no true and proper curriculum designed to develop writing. Which is more important-reading or writing? Which should be taught first in school? If you ask them, educationalists will assure you that reading and writing complement each other. Both are important, they will say. This is educational theory. But if you look at the curriculum, interview teachers and discuss their training, review research grants from foundations and the Office of Education,..... it becomes big-as-life plain that in practice everyone thinks, reading is decidedly more important. Every year the sky is filled with reports of new reading research; they funnel out of the Office of Education like bats from a backless cave. Education researchers asked the federal government for \$ 117 million in 1966-67. No one knows how much of this money went to reading as against writing research, but without exact information from Washington, \$9.95 for reading for every nickle spent for writing is not a bad guess."

"Communication failures among business and professional people can't be blamed on jargon, altho jargon is usually blamed. The ultimate origin of communication failures is in first grade, where reading is separated from writing and where reading is aggressively promoted in the absence of any true curriculum of writing instruction. The growth of our nation is being blocked by the inability of our people to describe original thinking or to present plans for new development or to report research in clear, usable English."

"Bad writing can stop the firing of a rocket, steal learning from children, stall an executive's career, kill a sale, put a job out of reach. The end penalty of bad writing is either nongrowth or misgrowth. It attacks growth in different ways: it eats profits, wastes time and work, spoils belief, isolates the lonely. It attacks all growth, everybody's growth: It's an insidious handicap."

"The researcher who fails to write a clear, usable report fails the organization that supports him. He fails himself, too, for his own growth stops if he can't describe his findings to anyone. One immediate product of this system is the unexpressed teenager. An ultimate product is the apathetic, disengaged, impersonal man; he reads his exercise watching televised baseball; he substitutes panel discussions for conversation. He is a noncommitted, noncommittal, noncommunicative man. He can catch information beamed at him over thousands of miles, but he can't send words a few inches away to some one he cares for."

"What are the characteristics of a writing-oriented school? A writing-oriented school would not only teach writing as a subject in its own right, but would teach most other subjects as well *through* writing. It would strive to meet life's communicative needs. Life needs don't begin after graduation. For the pupil life is school. Writing should be the student's most important means of communicating what he knows about his studies. A writing-oriented school would teach children not only to solve problems but to solve the added problem of communicating their solutions."

Next the important question is: What makes writers? In this respect, first we must consider: what *prevents* talkative 6-7 year-olds from expressing their thoughts on paper as well as they do with their articulate tongues? Ask any group of six-year-olds to tell of their experiences and you are mobbed with offers. "Almost everyone's hand was up, waving for attention. Each child wanted to tell me something. They all began talking at once. 'All right! Enough! I can't listen to everyone at once. Open your books and write down just what you were going to tell me.'"

"The older children lowered their hands, opened their booklets and studied the blank pages. A few of them began to write. Many still wanted to talk. Foreheads wrinkled. All the fun had suddenly been let out of the room. I walked around among them to see who needed help. They all needed help. Later, 'Time's up,' I said. They were glad to quit, in a hurry to get out. I had 40 booklets when they had all gone. The 9- and 10-year old children wrote something, a few eights, but 19 booklets were blank. The imaginative 7's had given me nothing."

"Why was writing so hard? When did children start learning to write? The questions faded away unanswered at this time. Two years later they came back when I was in Bethlehem, Pennsylvania. Why is it so hard to get English down on paper?" began to be clearer.

"Godfrey Dewey in his booklet *How We Spell!* distinguishes 41 sounds in English that can be spelled a total of 507 ways - 191 ways to spell 24 consonant sounds; 316 ways to spell 17 vowel sounds; 46 ways to pronounce 21 consonant symbols; 36 ways to pronounce 5 vowels; 26 silent letters in the alphabet (every letter is silent in some word): The possible ways in which a simple word like *motor* can be spelled is astronomical-in the hundreds of thousands."

"Why do we have only 26 symbols when we need almost twice as many? Because we never had an alphabet custom-made for our speech. English spelling was concocted by Anglo-Saxon storytellers, French scribes, and Dutch printers using an Italian alphabet. Frequently Dutch printers solved English spelling problems by using Dutch spelling rules. When you examine the freak spelling system these four European allies produced, you wonder why anyone would dream of putting an atom bomb or Polaris submarine or even a supermarket or a newsstand under their joint control." It is so bad.

"Since Italian is a one-sound-one-symbol language, an Italian never has to spell his name to another Italian, whereas we seem always to be spelling our names to someone. [See Bulletin Bites.] A friend named Zaepcke tells telephone operators who ask him to spell his name: 'Zaepcke-z as in *xylophone*, a as in *aisle*, e as in *eulogy*, p as in *pneumonia*, c as in *czar*, k as in *knee*, and e as in *ecstasy*. "When they get thru that, they know nothing!"

Don't you think "The English language is a hell of a trick to play on a little kid? Adults learn to be amused by the oddities of English spelling. But to children, English writing is the opposite of amusing, a rude and cruel fun-house fixed with fakery, unwanted surprises, and waste-of-time dead ends. The unfair thing is that many children committed to this crazy house believe it is themselves who are wrong and not the house which is at fault. If children want their writing to be understood, they've got to make sure their spelling is rite, write, wright, right. It isn't only children whose memories are overtaxed by English spellings; their teachers sometimes bend under the strain too.

Even computers are baffled by our spellings. In a massive study of English spelling, Dr. Paul R. Hanna programmed a computer with 203 different spelling rules and fed the machine 17,009 of our most common words. The computer spelled 8,516 (51.13%) of the words wrong! 6,195 were spelled with one error, 1,941 words with two errors, and 390 words with 3 or more errors." So what can you expect of a child? "A child will not trust the person who has deceived him once or twice. How will he learn to trust our English spellings which repeatedly trick him?" But if you give him a reliable writing tool, a phonetic spelling, you will make it easy for the child to express his thoughts in writing - and then he will be almost as voluble on paper as he is in speech. When the biggest obstacle to writing is eliminated, children are quick to show their expressiveness. The only way this obstacle of English spelling can be sidetracked satisfactorily is by the temporary use of a phonetic medium - an alphabet that is reliable. i.t.a. is one such alphabet that has seen considerable use in many parts of the English-speaking world, for the particular purpose of making an easy detour around the anomalies of spelling. It is the only one that has had any extensive use. Others that have been proposed are: World English, Diacritical Marking System, Unifon, Edwin Leigh's Pronouncing Orthography, and, while not an alphabet, is a means of coordinating sounds and spellings called Words In Color.

He goes on to say, "I see no reason why the World English alphabet could not successfully help children to write, but I have no samples of children using it for communication. I have no samples either of the use of Unifon or the Diacritical Marking System, so I cannot discuss these alphabets. In this book I restrict my remarks to the i.t.a. since I have some 6000 samples of writing by six-year-old children using it. They have been sent to me from Canada, England, Nigeria, Hong Kong, the United Nations School in New York City, and from many parts of the United States."

"i.t.a. stands radically different from the basal-reader system and its various phonic-system dependents, i.t.a. is a *medium* whereas the basal-reader system is merely a *method*. i.t.a. is the alphabet itself; there are various *methods* for teaching with it. The basal-reader system is one method for teaching or using our traditional alphabet. Scott Foresman does not happily advertise the fact, but it has put Dick & Jane into i.t.a. In other words, the *basal-reader method* can be used - if desired - to teach any alphabet, whether German, French or Italian, but of course makes sense only with English. Why? Because it was designed to cope with the inconsistent traditional English spellings."

"According to a distinguished spelling authority, Ernest Horn, more than half the words in *A Pronouncing Dictionary of American English* contain silent letters; about a sixth of the words contain double letters when only one is pronounced. Because English sounds are not spelled with consistency or logic, it is necessary to memorize how words look to spell them right. No one writing any English word can be sure his spelling is right without having first seen and memorized the spelling."

"Language is primarily audible, not visible, and is meant for the ear more than for the eye. The very word *language* is from *lingua* - tongue. It follows that since spelling represents the sounds of one's tongue, they ought to call up voices. The child who learns English by the traditional alphabet is forced to learn it by *seeing* it. He is taught that "magic e" at the end of the word can change the word and make the vowel 'say its name.' He will learn little rules that help him spell, such as: 'When two vowels go walking, the first does all the talking: Of course, if the first vowel is the only one he can *hear*, he will have to *see* the word to know two vowels are there. He won't be able to write it and spell it until he has seen it. Again, he is dependent on seeing and reading for his writing."

"What difference would a one-sound-one-symbol alphabet make to a child in elementary school? What does an Italian school child have that an American school child doesn't have? An Italian child never has to spell his name to the teacher or to another Italian child, whereas most American

children have to spell their names from the time they register till they graduate from college, and they continue to spell their names forever after."

"Italian school children never have to buy a speller since spelling is not a subject in their curriculum (they spell by sound). By contrast, American children learning English must buy a speller every year from the 2nd grade through 6th grade and in some systems through 8th grade. [See Bulletin Bites.] He will continue learning how to spell English for the rest of his life. Yet even the poorest of Italian secretaries is a good speller because they spell by sound."

"i.t.a. is the *freedom* alphabet because it liberates the child's own sentences, revealing the order of his mind and the state of his feelings expressed in his own language without help, put on paper without spelling inhibitions." Eleven reasons are given why i.t.a. children write earlier, easier, better and more.

Can you imagine what are the Xerox Generations? Are we training generations of copy-cats? - non-thinkers? - duplicators? the dictation class in writing? Then read the 8 wrongs of dictation. (amusing as well as enlightening).

"The authors of *English, Your Language* are frustrated by having to teach children who cannot express themselves. This book typically teaches children how to make capitals, punctuation marks, etc. without being able to teach them to communicate ideas. "The trouble with this book is not with its authors but with its users-children who can't write as they talk because they are victims of their own reading instruction. The book is helpless to free them because it itself is ensnared by the basal readers it serves."

I highly recommend the 8 points of a curriculum that is writing-oriented, and wish we had space for it.

"A child's early writings can be a valuable diagnostic tool for the educator, the social worker, and the educational psychologist. The i.t.a. first-graders writings could be saved as a source-bin for generalizations regarding his education."

"A miraculous golden flow of new writing has been coming from i.t.a. first graders, but no one is doing anything to learn from it or to direct its course. Some Reading Experts comment on its charm, others step warily around it and let it wash by without comment; still others remark at the 'atrocious spellings' floating in the prolific stream or wary about the ungraded words they see. All seem to be too preoccupied with reading to realize they're dealing with a new educand."

"The failure of the education profession to design an adequate measure for writing, besides dramatizing the favoritism shown to reading and passivity in our educational attitude, suggests that there is no adequate measure of reading, either."

"It is typical of the reading favoritism that pervades our culture and stubbornly obsesses our educators that i.t.a.'s value in writing instruction is repeatedly overlooked and grossly undervalued. I know of only one study that has compared i.t.a. and T.O. writing. The decision to reject or accept i.t.a. merely as a device for reading or to review it merely as a bundle of books is an arrogant misuse of power and trust. It is a presumptuous decision because it pretends that reading is all that counts in education. Since there are no grade-school writing consultants to speak up on behalf of writing instruction, it is irresponsible for reading experts to assume that early writing is an interesting, charming, delightful phenomenon but a trivial one for all that."

[Spelling Progress Bulletin Spring 1969 p19]

A Petition

To Dr. James E. Allen, Jr. , Commissioner of Education, H.E.W. Bldg, Washington, D.C. 20025

As citizens of the U.S.A. who are really concerned about the welfare of future generations of children who have nothing to say about the wrongs perpetrated on them, and mindful of the harm done by our deceitful, misleading spelling, do petition you to call an International Conference of representatives of English-speaking countries to find the best way to simplify our spelling and to plan for the manner of its adoption and utilization.

We urge you to do this so that everyone who can pronounce a word will be able to spell it and have the advantages now enjoyed in such countries as Italy, Czecho-Slovakia, Finland, and Turkey. The advantages are obvious, the difficulties are largely imaginary, the results will be everlastingly beneficial to education. Delay is caused only by human inertia and disinterest. Where is our patriotism and unselfish interest in our children?

Name Address Occupation

-o0o-

Zonic

Zone-Zonic-ic

Each letter represents a single Zone of closely related speech sounds

AT LAST A PRACTICAL PHONETIC SYSTEM!

Easy to read
Easy to write
Only 33 letters
No silent letters
No double letters
No digraphs
Saves time and space
Conforms with dictionary
Each spelling verifiable
Typewriters easily adapted

Zonic Alfabet

23 Prezent leturz (omiting K Q X)
4 Lang veelz (az in tra tre tri tru)
3 Nu veelz (az in lang hes lat)
3 Nu consonants (az in cin sin hin)
33 Total

A practical WA tu rit hwat yu SA
SAVZ ovur 10% in tim, papur & inc!

SPEAKING IS SPELLING
by William W. Murphy

Read all about Zonic spelling
in this 35-page booklet by the
originator of this system.

PARTIAL LIST of CONTENTS

Sounds of the Zonic letters
Examples (370 words)
Twenty-third Psalm
Gettysburg Address
Star-Spangled Banner
Verses from Shakespeare
Proverbs and jokes in Zonic
Zonic equivalents of
dictionary symbols
Answers to most questions

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Address all communications to:

ZONIC SPELLING SERVICE

A nonprofit enterprise to encourage the uniform and orderly growth of Zonic spelling

GLEN RIDGE, N. J.