

# Spelling Progress Bulletin Summer 1982

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

## Summer 1982

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## Special Issue for Special Interest Group of I.R.A.

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## 1. Announcements

**Meeting: Special Interest Group 18, Reading: Orthography and Word Perception.** (Open to all conferees) International Reading Assoc. 27th Annual Convention, Apt. 26-30, 1982, Chicago, Ill. Conrad Hilton Hotel.

*Session:* 9.00-11:45 A.M. Thurs. Apr. 29, 1982, Williford B Room, Conrad Hilton Hotel.

*Program Organizer:* Dr. -Emmett Albert Betts, Prof. Emeritus, Univ. of Miami. Winter Haven, Florida.

*Topic:* Reading Levels, Word Perception, Comprehension

*Chairperson:* Dr. Katherine P. Betts, Florida Southern College

Part 1: Demonstration with children by Dr. Emmett A. Betts

Part 2: Evaluation of pupil learning needs and achievement by participants, responses to questions from conferees, and open-ended discussion of the topic

*Chairman:* Dr. Jack E. Haynes, Florida Southern College Part 3: Business meeting: Reports, election. of officers, planning for Anaheim, May 2-6, 1983

*Participants:*

Dr. Paul C. Berg, Univ. of So. Carolina  
Mr. Joseph E. Brown, Hill Vocational Academic Center  
Dr. Lou Burmeister, Univ. of Texas at El Paso  
Dr. Earl Cheek, Louisiana State Univ., Boca Raton  
Dr. H. Ward Ewalt, Jr. Vision Specialist Pittsburgh, Pa.  
Dr. George E. Mason, Univ. of Georgia  
Dr. John Henry Martin, Phonemic Spelling Council  
Dr. Betty Roe., Tennessee Tech. Univ.  
Dr. Robert Trammell, Florida Atlantic Univ.  
Dr. Josephine Wolfe, Community College, Philadelphia

*Publications:* Newell W. Tune, Editor

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*[Spelling Progress Bulletin Summer 1982 pp2-4 in the printed version]*

## **2. Reading: Orthography and Word Perception**

Special Interest Group

27th Annual Convention, I.R.A.

Chicago Conrad Hilton, Williford B.

Thursday, Apr. 29, 1982, 9:00-11:45 A.M.

All participants are available to discuss the following or other questions addressing the topic, including those posed by conferees. Everyone attending this session is invited to participate.

### **Basic Assumptions**

1. Is phonics for reading or is it for spelling? (Zintz)
2. What factors contribute to effective word perception? (Betts)
  - a. Personal need and other facets of motivation b. Readability of material
    - (1) Independent (individualized) reading level
    - (2) Instructional (individual or group) reading level
  - c. Meaning
    - (1) Referential
    - (2) Emotive
    - (3) Grammatical, or linguistic (morphology or syntax)
  - d. Chunking, or grouping, in terms of phonograms
    - (1) CV (e.g., *chi* of *chip*) and VC (e.g., *-ip* of *chip*)
    - (2) Pronounceable units of a word
  - e. Analogy f. Attention g. Learning set
  - h. Contrast; e.g. minimum pairs (*cat-hat, bat-bit*),
  - i. Closure, perceptual or cognitive
  - j. Feedback
  - k. Application
    1. Self-image (positive self-perception)
  - m. Etc.

## Orthography

3. Chomsky and Halle claimed that English has a "near optimal" spelling system. What evidence supports this claim? What evidence refutes this claim? What are the educational implications? (Barnitz)
4. What are the limitations and advantages of phonic generalizations? (Roe)
  - a. Differences in "generalizations" and "rules"
  - b. Applicability of a particular generalization
  - c. Importance of accent (stress) within words on pronunciation of syllables
  - d. Importance of accent within sentences on pronunciation of function words (e.g., *a, the, an*)
5. Given current theories of reading based on psycholinguistics and cognitive psychology, what is the role of orthography in the "interactive" reading process and the "interactive" learning to read process? (Barnitz)
6. What are the limitations of phonic rules? (Betts)
  - a. Application/exception ratios; e.g., the "final-e rule" in *take* versus *have*
  - b. Ambiguity of rules; e.g., controlled *r* usually expressed as, "If only one vowel is followed by *r*, the sound is usually governed by *r*."
    - (1) Consonant *r*, as in *red, bread, street*
    - (2) Vowel /ər/, stressed (*fern, hurt, shirt*) and unstressed (*mother, harbor, dollar*), both /murder)
    - (3) Centering diphthongs  
/är/ as in *star*, /oar/ as in *pair*, /ōr/ as in *door* /ar/ as in *carry*, /ur/ as in *poor*, /it/ as in *spirit*  
/iər/ as in *here*, /īər/ as in *fire*, /eər/ as in *care*, /our/ as in *our*, /yur/ as in *cure* (triphthong)
  - c. Effect of syllable stress on applicability of phonic rules; e.g., "present a gift" versus "receive a present"
  - d. Effect of phrase stress on applicability of phonic rules; special perception problems of function words (e.g., *and* /"and, and, an/
7. What are the relationships between phonic rules and / or spelling patterns? (Betts)
  - a. Closed-syllable words in beginning reading materials, as in *at-cat, cap-rap*?
  - b. Initial teaching medium for beginning reading?
8. Why do the preponderance of words in beginning reading tend to be exceptions to the phonic rules? What are the implications? (Betts)
9. What are the differences, if any, between spelling patterns (a la Bloomfield) and vowel "rules"? (Betts)

## Research

10. Is there a relationship between the speed of reading of beginners, their intonation patterns, and their comprehension? (Mason)
11. Do modified alphabets (UNIFON, i.t.a., etc.) adversely affect spelling? (Berg)
12. Comparing various types of writing systems (alphabets, syllabaries, logographies), what are the properties which facilitate or impede learning to read in a first language? In a second language? (Barnitz)
13. What is the role of orthographic characteristics in the transfer of literacy from one language to another (e.g., from French to English, from Arabic to English, from Chinese to Arabic, etc.)? (Barnitz)
14. Do siblings show closer spelling traits than do random samplings of children? (Berg)
15. What do experiments show about word perception or various proposals for spelling reform or i.t.m.'s by (a) learners, (b) fluent English readers, if they are given a key to the spelling principles? Are some much easier to read quickly than others? If so, why? (Yule)

## Pupil Learning

16. How are early concepts of print (e.g., concepts of a "word") related to the development of spelling ability? Of word perception? (Hoffman)
17. What are the relationships between spelling, word perception, and concept development? (Wolfe)
18. Reversals of both letters and words are not uncommon. What are some specific measures to correct this? Are there measures which can be taken to prevent this problem from developing? (Terrill)
19. How much direct correlation is there between spelling levels and reading levels? If there is a correlation, does it mean anything? (Ginyard)
20. What relation do learning modes-auditory, visual, kinesthetic, haptic-have on learning to spell? (Berg) Is spelling primarily a visual or auditory function? (Berg)
21. The perception of syllables is one of the most useful tools which a reader can have to produce manageable units both for spellings in reading and spelling for writing. What phonetic [phonemic] principles need to be learned before it is practical to learn syllabication and to use it efficiently? (Terrill)
22. What about the students who "can't do" phonics? They are given a phonics workbook year after year and many times are turned off to reading. What can be done to help these students turn on to the idea of reading and begin to learn to read? (Terrill)
23. What is the relationship between phonic skills and word perception skills? (Betts)
24. How can word perception be made automatic in the ongoing processes of reading? (Betts)
25. What restraints influence word perception? (Betts)
  - a. Phonotactics; e.g., s /s/ in *likes* versus s /z/ in *boys*
  - b. Graphotactic; e.g., gemination as in *happy*
  - c. Syntactic; e.g., word order
  - d. Morphological; e.g., *n(a)tion* versus *n(a)tional*, *Congress* versus *congressional*
  - e. Pragmatic; e.g., reader's reaction
  - f. Semantic; e.g., shifts in meaning as in *home run*, *run a meeting*, *run for office*, *run two miles*, etc.
26. Can words be learned best when presented with pictures or context clues, or when presented without such clues? (Roe)
27. What are beginning readers' concepts of letters, words, sounds, and how should these affect instruction? (Roe)
28. What are beginning readers' understandings of other concepts (such as beginning, middle, ending, etc.) related to reading and how do these affect instruction? (Roe)
29. Do good readers tend to use primarily text-driven or primarily concept-driven word identification strategies? Which strategies are used by poor readers? (Roe)
30. What happens to a speaker of non-standard dialect when literacy is based on English spellings with standard English pronunciations (e.g., *pin-pen*, *tin-ten*) ? (Ginyard)
31. How can confusion in reading capital and lowercase letters be minimized for beginners? (Gg, Aa, Qq, Bb, Dd) For some children this is a problem through third grade. (Ginyard)
32. What may be done to help or correct the child who must spell each word that he reads? Is this a serious problem? Is it indicative of a learning disability? (Ginyard)
33. It is said that the ability to read letters and numbers is the best predictor of a pupil's achievement (success) in beginning reading. Is this accurate? If it is, why? (Terrill)

34. Other authorities state that the ability to write the alphabet is the best "reading readiness" test. What abilities are involved in this "test"? Are all of these abilities necessary in learning to read? (Terrill)
35. What are the minimum rules and understandings involving phonics and word structure that are really necessary and useful? (Terrill)
36. What types of perceptual learning are essential for effective reading? (Betts)
- Category learning; e.g., *hat-lap, pig-sit*
  - Cue learning; e.g., *aw* of *saw, draw*; *ar* of *car, far*
  - Probability learning; e.g., *oo* in *look* versus *room*
  - Alternation learning; e.g., *n(a)tion-n(a)tional*
37. In a program of preparation for beginning reading, what specific learnings (components) are critical? (Betts)
- How to insure concept of a word; e.g., /hē/ is *he*
  - How to insure concept of a speech sound; e.g., /ē/ in *he, me, we*
  - How to develop visual-motor skills relevant to perception of geometric forms called letters of the alphabet
  - How to develop concepts, in diverse areas of experience, which *yield* vocabulary
38. What words are selected for study by the learner? (Betts)
- Who identifies the need?
  - Who keeps the record of the need? Pupil or teacher?
39. How helpful are prefixes [affixes] to words for finding the meaning of a word? (Berg)
40. What role does spelling contribute to concept development? (Wolfe)
41. Is there a relationship between reading ability and spelling problems which children may have? (Ginyard)
42. What is the relationship between "developmental age" (i.e., considerations such as the Piagetian concept of "conservation" as it relates to successful mental operations with whole-part relationships, and the limitations of short-term memory) and an optimal age for learning to spell? [Implications for word perception?] (Roberts)
43. Is there such a thing as a "spelling aptitude" – or conversely, a predisposition to spelling disability? What evidence can be cited to support or refute such phenomena? (Roberts)
44. Is the major reason why fluent readers use a wide variety of word perception techniques - phonotactic, graphotactic, syntactic, morphological, pragmatic, and semantic because English spelling is so inconsistent that one has to use whatever one can grab to decode such a muddled mixture of inconsistent principles and exceptions? (Yule)
45. Why do phonic rules stated as high-level abstractions frustrate pupil attempts at understanding? (E.g., the short-vowel rule for *a* in *sat*, *e* in *pet*, *i* in *hit*, *o* in *not*, *u* in *but*; the split-digraph rule for *made, these, kite, hope, use*; the digraph rule for *pail, each, boat*, etc.) (Betts)

### **Methodology**

46. Are technical terms such as vowel, consonant, digraph, blend, etc. necessary for reading instruction? Do they help in any way? (Roe)
47. Is the use of the terms vowel and consonant essential to the teaching of reading? For beginners? (Betts)
48. What are some advantages and disadvantages of analytic versus synthetic phonics? (Roe)
49. Is the practice harmful when, in teaching phonics, the teacher voices the single letter sounds of b, p, d, t, etc. by adding the short "a" sound? (Berg)

50. What is the evidence on the effectiveness of analytic (whole word) versus synthetic (blending) phonics? (Betts)
- Beacon initial blend method; e.g., *ha-* of *hat*, *ca* of *cat* as pronounceable units to reduce distortion between phonogram and word
  - Aldine final blend method; e.g., *-at* of *hat*, *-at* of *cat* as pronounceable units to reduce distortion between phonogram and word
  - Phonics countdown; e.g., *-at*, *ha-*, *-a-*, *hat* of /hat/ to avoid distortion of consonant sounds and to focus attention on the "hard spots" of whole words, beginning and ending with referential and/or syntactic meaning (perceptual and cognitive closure)
  - So-called whole-word method which has deteriorated into "sight-word" and "telling-the-child-the -word" "methods"
51. Should phonics be taught in isolation from reading in context? Why or why not? (Roe)
52. How can we best instill meaning as the closure "trigger" in word recognition? (Mason)
53. What are the implications of the "chunking" theory on methodology for teaching decoding (print to sound, or sound to print) and decoding (print to meaning) – to beginning readers? (Burmeister)
54. Word lists are often sent home by teachers for practice in word recognition and meaning. Is this a good practice? (Berg)
55. How important is it to teach phonetic [phonemic] respellings of words, often included in basal readers, too. I usually skip it. (Ginyard)
56. What are the effects of an overemphasis of phonics on the spelling process? (Wolfe)
57. Although spelling reform could indeed make English more directly phonemic, how can teachers facilitate learning to read in traditional orthography as it is still being used in our society? (Barnitz)
58. What "first aid" is appropriate when the pupil requests help on a word during the first, or silent, reading of a selection? (Betts)
- On the unknown phonogram, or hard spot, previously studied?
  - on the unknown phonogram, or hard spot, of a word which presents a new learning?
59. What techniques of word perception are most efficient for the linguistically skillful, and would be most efficient in a reformed spelling? What would be the most efficient for the educationally disadvantaged and for second language learners? (Yule)
60. What is the validity of the psycholinguistic approach's negative criticism of phonics? (Groff)
61. In spellings and word perception, how useful is the teaching of word patterns? (Terrill)
62. What techniques and procedures are valid for the development of word perception skills following the first, or silent, reading? (Betts)
- The values and limitations of the "phonics countdown"?
  - The values and limitations of substitution techniques?
63. Should the letters of the alphabet be taught before learning to read? What is meant by learning the letters? For instance: reading, writing, saying, etc. (all of these, one of these?) (Terrill)
64. How effective is "letter" phonics versus pronounceable-units phonics? (Betts)
- Do letters have sounds? (E.g., what is the sound represented by *c* in *city*, *car*, *ocean*, *cello*, etc.)
  - Do sounds have letters? (E.g., what letters represent the sound /s/ in *sun*, *city*, *scene*, *psalm*, etc.?)
  - Why does "letter" phonics, or "sounding-out", words create serious reading disabilities (E.g., sounding out *cat* as "cuh-a-tuh" or *scratch* as "suh-cuh-er-a-chuh"?)
65. If a list of one-hundred most common (or whatever number is selected) words were to be

learned for instant recognition, what would be the most effective teaching method or methods? For all learners? What would be the least effective? (Terrill)

66. Is it possible to teach phonics, word structure, and spelling of words within the spelling class, and the changing of word forms within the language lesson, and thus leave the reading lesson free for actual reading and for working on comprehension (thus perceiving and using word spellings in context.)? (Terrill)

67. What is the evidence on the effectiveness of teaching phonics isolated from the pupil's immediate needs? (Betts)

a. How is the pupil's motivation captured? (need group)

b. When is the pupil taught to apply a phonic skill?

c. When is time scheduled to study word-perception skills identified during the first, or silent, reading? d. How does drill on a list of words isolated from a reading interfere with motivation and learning?

68. Are flashcards of words and pictures of value in beginning reading? (Terrill)

69. Are tachistoscopic devices of value in perception and word perception? (Terrill)

70. When should a child be told a word he or she cannot identify? (Roe)

71. Under what circumstances does the teacher or parent tell the child the word he/she cannot identify? (Betts)

a. Consider: *one, you, your, would* and other maverick words

b. Consider: *was /wəz/, from /frəm/, been /bin/, often /ofən/* and other words with misleading signals to pronunciation

c. Consider: *and /ænd, ənd, ən/, or /ɔr, ɔr/, for /fər, fɔr/*, and other function words, usually unstressed

d. Consider: *-ew* of *sew*, and other phonograms that present isolated instances of unique spellings

e. Consider: *she, time, red, sun*, and other words that tend to fit spelling patterns, or phonic rules.

72. If a predisposition to "spelling disability" is postulated, how crucial is instructional methodology for enabling learners to acquire competence? What methodology, are considered most enabling? Most disabling? (Robert)

73. If an aptitude for spelling is postulate, is methodology crucial, or direct instruction even necessary? (Roberts)

74. Are flashcards of words and pictures of value in beginning reading? (Terrill)

75. How is a phonemically based dictionary used in a phonics program? (E.g., G & C Merriam's 1956 edition, Webster's New Elementary Dictionary, distributed by American Book Co.) (Betts)

a. Why is the syllabication of dictionary entries (versus respellings to show pronunciation) inappropriate?

Examples:	Dictionary Entry	Respelling
	farm-er	/'fār-mər/
	serv-ant	/'ser-vənt/
	hur-ry	/'hər-e/
	thirst-y	/'thərs-t ē/
	bot-tom	/'bāt-əm/
	bor-row	/'bār-o /
	ex-er-cise	/'ek-sər-'sīz/
	fol-low	/'fāl-o/

b. What is the purpose of the respelling?

76. As a teacher it is difficult for me to hear vowel sounds – short or long. How can I teach my

students when I don't hear the sounds? I learned to read (somehow) (Ginyard)

77. Is guidance on word perception as one facet of reading instruction given in extant professional textbooks? If so, where? (Betts)

a. Confusion of terms: phonics, phonetics, phonemic

b. Indiscriminate and ambiguous confusion of orthographic and phonemic terms; e.g., digraphs, diphthongs

c. Omission of graphic *r* considerations: consonant *r*, vowel *r*, and 12 centering diphthongs

78. What conditions are essential for the child to learn to read by structures?

a. How do we cause the learner to be aware of grammatical meaning?

b. What causes breakdown in intonation (oral re-reading)?

c. Does the systematic study of grammar facilitate comprehension and rhythmical reading?

d. How does punctuation signal intonation and referential meaning?

e. How does the irregular spelling of words interfere with intonation? E.g., *know* (no), *knows* (nose), *some* (sum), *laugh* (laf)

79. Why do attempts to say consonant boundaries in isolation (e.g., /b/ of /bat/) frustrate beginners in reading and, therefore, produce learning disabilities?

80. Why are contractions introduced gradually in basic readers?

a. What spelling problems are introduced by contractions?

b. To what extent do contractions interfere with learning word-perception skills by analogy – by spelling patterns?

81. How are perceptual and cognitive closure effected in a directed reading-study activity?

a. Do some learners experience difficulty in perceptual closure? Why?

b. How does syntactic meaning reinforce referential meaning and, therefore, contribute to effective intonation?

82. Why are there so many different types of perceptual learning?

a. How can category learning be increased and other types of learning be reduced, thereby facilitating learning to read?

(1) Why is analogy not always a potent factor in learning word-perception skills? E.g., *h(ear)* vs *h(ear)d*, *h(ea)d* vs *st(ea)k*

(2) To what extent can spellings be regularized in self-help activities? E.g., *said* /sed/

b. Can cue learning be reduced?

(1) How does analogy learning, interfere with cue learning?

(2) How can regularized spelling as self-help aids facilitate cue learning?

c. How can probability learning be reduced?

(1) What is the probability of *ew* (few) representing /yü/ in more than one commonly used word?

(2) What is the probability of *oo* representing /ū/ in moon vs. /u/ in look?

d. At what reading "levels" does alternation learning become increasingly important? E.g., /a/ in *nātion* vs. /a/ in *national: m(at)ure* vs. *m(at)uration*

83. To what extent do spelling *demons* contribute to word-perception errors?

84. What factors in the readability of materials facilitate learning of word-perception skills?

85. Why are word-perception skills and abilities crucial in evaluating "level" of achievement?

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### **3. The First Essential in Reading Improvement, by Emmett Albert Betts, Ph.D., LL.D.\***

\*Reading Research Lab, Winter Haven, Fla.

Let me begin our discussion of the first essential in reading instruction by telling you about Charlie. At age 12 Charlie was repeating the work scheduled for the sixth grade. In school he was accused of being mentally retarded. In fact, the school reports indicated that he was too retarded or too lazy to learn to read. To prove this point, he had been given a group test of intelligence which indicated an I.Q. of 68.

These school reports did not impress us, however. After all, this particular test of intelligence was actually a reading test. If Charlie had a reading disability, of course he could do very little with the so-called intelligence test.

My first session with Charlie produced several surprises. His blue eyes sparkled as he was introduced. Standing a full 5 feet 8 inches, he obviously was well into adolescence. Furthermore, his ready wit and unusually large vocabulary were evidence of advanced social and mental maturity. He was a man's boy-husky, energetic, outgoing, courteous, and responsive.

After a preliminary discussion, we settled down to the job of getting at the cause or causes of his problem. Our first step was to give him a word identification test. This test included the most commonly used words at each reader level, beginning with the pre-primer. At the pre-primer level he could identify *the, a, mother, is, I, to, and*, but he had no skills to help him pronounce *will, little, here*. At the primary level he could not get past *with*, the first word.

Charlie's results on the word identification test, of course, provided clues to his reading ability. If he could not pronounce words, he would be unable to do much thinking in a reading situation.

Our next step was to find out how well he could read. Using the information obtained from the word identification test, we decided to begin with a pre-primer. Of course, we realized the short, stilted sentences would not make it possible for Charlie to do his best because he was a past master in the use of oral language.

Anyone, of course, could have predicted that he would stumble in a pre-primer or primer. And this is exactly what he did. He was a non-reader.

This information was obtained in exactly four minutes. Not one cent was spent for special testing materials. Only the materials found in a classroom were used; namely a set of graded textbooks! Furthermore, any teacher or most parents could have used these materials to discover Charlie's reading level – *the first essential* for both Charlie and his teacher.

#### **Hearing Comprehension**

When we read to Charlie from the set of basic readers, we found him to have excellent hearing comprehension. He was able to answer all questions about the materials – even at the twelfth-grade level.

While Charlie stumbled when he tried to read a pre-primer, he could understand and discuss twelfth grade materials. These findings indicated at least twelve years of reading retardation. He was retarded in reading but he definitely was not mentally retarded!

Charlie was given other tests to help us identify the causes of his problem so that we would know how to teach him. One of these tests was an individual test of intelligence Form L of *The Stanford-Binet Tests of Intelligence*.

Even on this test, Charlie's reading disability caused him to fail certain items: Reading and Report, the Minkus language-completion test, and the dissected sentences. But in spite of his reading handicap, Charlie made an I.Q. of 138, a superior rating.

Here, then, was a boy of superior intelligence who could not read. We knew that he had to be taken through the first steps in learning to read – which we did.

There are many children and adolescents and even adults who are retarded in reading. Not many, however, are as seriously retarded as Charlie was. Fortunately, most of these children have normal or superior intelligence and can overcome their reading handicaps, as Charlie did. That is, they can overcome their handicaps IF their teachers and parents cooperate with them by estimating their starting levels. *The first essential in helping the learner is to find out where he is and to, begin where he is!*

### **High Achievers**

Now let us turn from Charlie's needs to other needs. Eight-year old Peggy, for instance, was in third grade but at home she enjoyed reading the Reader's Digest. It would be an understatement to say that in school she was not very enthusiastic about the third reader. In fact, she had read it just as she turned seven. While most of her age-mates were avid consumers of fairy tales, she was more concerned with stories of real life and a pictured encyclopedia. To guide her reading improvement, her teacher needed to know her level of reading ability. It was just as essential to know Peggy's level of reading achievement as it was to know Charlie's.

There are high school students who can read nothing more difficult than *Friday-The Arapaho Indian*, a book written for teen-agers with about second-grade level ability. At the other extreme there are students who enjoy Ibsen's *Peer Gynt* or Thomas Hardy's *Far from the Maddening Crowd* or Plato's *Republic*. To capture and hold learner interest and to provide the best conditions for improvement of reading ability, master teachers begin with the *first essential*: they estimate levels of reading achievement.

Charlie was a bright boy but he was somewhat frustrated with a pre-primer and completely bogged down with a primer. On the other hand, Peggy was challenged by seventh and eighth grade materials and bored with third-grade books. Our major concern is with challenging the learner so that he *takes* interest and puts forth effort. Everything is lost when the learner is frustrated-he goes to pieces, we say.' Hence, the basic idea of beginning "where the learner is" calls for challenging rather than frustrating the learner.

### **Signs of Frustration**

A teacher does not have to be an expert in reading in order to estimate reading levels. She does need to know how to detect signs of trouble. Furthermore, these signs of trouble or frustration, are noted in all reading-study situations – in arithmetic, science, the social sciences, literature, or any other *group* activity.

One sign of frustration is the inability to comprehend, or understand, the ideas and concepts. For example, the child who smiles or laughs when he reads a joke or a tall tale is enjoying it, and therefore, is understanding it. The child who can relate what he knows about rainfall and other weather conditions to a statement about the crops grown in a region can do the necessary reasoning required for comprehension. When a child cannot make concepts from what he reads, he is in trouble. For, when the last word has been written on the subject of reading, the fact remains that, quite literally speaking, the materials of reading are concepts.

Another sign, or symptom, of trouble is the inability to identify written words. With the exception of non-readers, all individuals have a reading level at which they read without being bogged down by the mechanics of word pronunciation.

When an individual who has less than third-reader level ability is reading on his own (that is, independently), he can safely meet no more than one new word in 200 running words. For example, in a selection 600 words long, there should be no more than 3 words unknown to him.

If an individual who has third-grade or higher level reading ability is reading *independently*, he can safely meet 1 new word in 100 running words. For example, in a selection 600 words long, he should meet no more than 6 words unknown to him.

An individual with more mature reading habits has more vivid perception skills to call on. He also has a broader and deeper background of experience with life and with language. All this maturity helps him to identify both the pronunciation and meaning of unknown words when he is on his own.

### **Reading Levels**

When a group of children is using a basic reader under teacher supervision, they can get on-the-spot help with unknown words. For this reason, they may meet one new word 50 running words without bogging down. At no time, however, should a child meet more than 1 unknown word in 20 running words. When he encounters more than 1 new word in 20 running words, he is in serious trouble. He is so busy sounding out words, he loses track of the trend of thought and no longer comprehends what he reads.

Fortunately, instructional materials are graded in reading difficulty. For example, in a graded series of basic readers, new words are introduced gradually. This policy makes it possible for a teacher to use an appropriate book for each of her reading groups in the classroom. If a certain reader level is too easy or too difficult for a given child, he can be transferred to another group where he can be challenged rather than frustrated.

Inability to pronounce words is only one sign of difficulty. When a child is doing silent reading, these are other signs of frustration to be avoided:

1. Lip movement or whispering the words
2. Low rate of reading
3. Exaggerated head movements
4. Use of a thumb or a finger to point to run along each line of type
5. Tension movements, such as frowning, excessive blinking, twisting, and squirming

Of course, a child who is challenged makes some of these undesirable responses. If he is given materials easier to read, he will show none of these signs of frustration. More important, he may show rapid improvement in his reading. Challenge him and he will make gains frustrate him and he will not only learn bad habits but also he may regress.

### **Oral Reading**

In life situations, oral reading usually is done following silent reading. Under this condition, oral re-reading is rhythmical and smooth and in a conversational tone. Signs that the material is too difficult include:

1. A lack of rhythm, or word-by-word reading
2. A high pitched voice
3. Irregular breathing
4. Failure to interpret punctuation, such as skimming over periods at the end of a sentence, or commas
5. Repetition of words
6. Insertion of words
7. Omission of words
8. Reversing words; e.g. say *saw* for *was*.

#### **4. Differentiated Instruction: The Teacher, by Emmett Albert Betts, Ph.D., LL.D.\***

\* Winter Haven, Fl.

In learning situations, the teacher is the key to the success of the pupils-to solid achievement. But the teacher's professional competence is achieved via teachers of teachers (i.e., the professors) who provide demonstrations, laboratories, and a thorough grounding in those disciplines basic to effective reading instruction. These basic disciplines include:

1. Phonemics as one facet of word perception
2. Orthography as another facet of word perception dealing with idiosyncracies of spelling (e.g., many, to-too-two, look-moon), function words (e.g., *and* usually pronounced /ən/, /an/, /n/, or /ad/ in a phrase)
3. Cognition (comprehension) as a crucial facet of word perception, critical reading, creative reading, or assimilative reading-all imperatives for understanding motivation
4. Perceptual processes as imperatives for fluent reading – e.g., types of perceptual learning required for dealing with the vagaries of spelling, factors in perception (e.g., learner discovery of NEED, feedback between speech and written language)
5. Motivation as the keystone to zestful and fruitful learning; e.g., capturing pupil concern on "what happens next" versus the arid, unproductive demand, "John, read the next sentence."
6. Differentiation of instruction-provision for differences in needs, interests, achievement, and motivations among learners in a group – as the basis for all effective instruction. For example, estimating achievement levels (e.g., independent or instructional reading levels) during each directed reading/study activity. Providing readable materials that *capture the motivation of each learner* via group (reading level, need, or special interest group) and individualized guidance

The above are only some of the imperatives for developing teacher competence. It is a big order which is defaulted in too many teacher-education institutions.

#### **Informal Inventories**

Teachers and others who have evaluated individualize reading programs have emphasized again and again: teachers using an individualized reading plan must have a thorough knowledge of how to estimate reading levels and of how to teach the skills of reading.

For either a group or an individualized plan, successful teachers are experienced in the use of informal inventories of word perception (survey and diagnostic) and informal inventories of reading achievement. They know that it is essential to estimate each pupil's independent reading level. These teachers also have access to information on the readability, or reader level, of books and other materials used for instruction. When this information is not available, they estimate the readability, often with the help of key pupils of known reading achievement.

How expert a teacher needs to be in identifying needed learnings, and teaching pupils those learnings depends upon how far she departs from the use of basic readers, study books, and special skill charts. Some teachers, for instance, follow closely the sequential development of word-

perception skills and thinking abilities in a carefully made basic reader series. These teachers, therefore, have access to systematic guidance on when and how to teach a "skill." However, teachers who rule out the use of basic reader material assume tremendous responsibilities for systematic "skill" development.

Equally important, successful teachers, using a group and/or individualized plan, know how to inventory pupil interests and other facets of motivation and how to guide him to a higher level of maturity. These teachers take a step in the right direction when they have "the pupil reading material in which he is interested." But they take an important next step when they extend and raise his interest achievement.

Since individualized reading is a plan for nurturing individual differences in the classroom rather than a reading method, it is not an easy "out" for the teacher.

### **The Teacher**

In any type of reading program, the teacher is the key to the success of the pupils. The teacher uses textbooks and other materials effectively or misuses them. The teacher makes the child comfortable in his reading by getting him in contact with the right material. The teacher assesses pupil interests, begins with his interests, and helps him to mature in those interests. The teacher guides the pupil in his systematic, gradual learning of word-perception skills so that he becomes independent in their automatic use. And the teacher guides the pupil step-by-step in learning how to think in a reading situation. To discharge her responsibilities, the teacher gives years of her life to study not only methods of teaching but also those disciplines-phonetics, semantics, child development, etc. – so necessary for scholarship to support her methods.

### **Keys to Success**

Success with either a group or an individualized plan depends upon the achievement of the pupils-their attitudes toward reading in both home and school, their efficiency in using skills, their ability to shift from light to depth reading as the occasion demands, and so on. What are the keys to success? These keys to the doors of the child's mind are many and varied, beginning with the teacher and parents:

1. The professional competence of the teacher in establishing rapport with her pupils, organizing the class for effective learning, and teaching skills
2. Parent-teacher rapport based on an understanding of their child's needs and of the teacher's plans and goals for meeting these specific needs
3. An adequate supply of books and instructional materials to serve the interests and needs of each individual in the class
4. Provision of time and guidance so that the pupil may have broad reading experiences in different types of reading materials
5. Opportunities for pupil self-evaluation
6. Learning conditions which permit the pupil to operate at his own level of achievement and to pace his own progress by his own, unique pattern of development
7. Teacher awareness of the idiosyncracies of the American English spelling system; e.g., the spellings which hinder word-perception, as *come, done, laugh, said, again, move*
8. Teacher competence in systematically teaching the pupil to shift his word-perception set from

category skills (e.g., *sat-hat, pet-get*) to cue skills (e.g., *ind-find, look-cook, all-tall*) to probability skills (e.g., *moon-look, they-say*)

9. Teacher competence in capturing learner motivation (not motivating the learner?) via pupil purposes for the first silent reading or the oral or silent re-reading of a selection, pupil identification of his word-perception needs in a legitimate reading situation, pupil awareness of success with specific learnings.

### **The Plan**

Often it is said that grouping is THE plan for meeting individual needs. Or, that individualized reading is THE plan that offers the final answer. Any plan developed in another teacher's classroom or in another school or school system may or may not be the answer at a given time. Since the 1920's, teachers have the choice of regimented, group, or individualized reading instruction. While teachers in the 1860's apparently had only one choice, today's teachers have three major choices, the first one – regimentation – being completely out of tune with the facts about individual differences. Undoubtedly, THE plan has not yet been developed, because new facts about individual differences in learning, group dynamics, motivation, word-perception, thinking, and related factors, are being reported by the researchers. Furthermore, the creativeness of teachers shows no signs of exhaustion or even slowing down. (Witness the superb articles, written by classroom teachers, appearing in magazines for teachers.)

### **Teacher-Principal Approach**

Right now more than 100 variant patterns of group and/or individualized plans are being used. Hence, it behooves each teacher to understand the basic principles of learning and to try out different plans that she can use with her class under prevailing conditions. Of course, a highly competent teacher can improve on the "prevailing conditions," or the status quo, by means of carefully planned strategy with the principal, supervisor, and parents. Since there are individual differences in competence and personality among teachers as well as among pupils, each teacher is to be encouraged to "experiment," or to "try on for size" a plan and to change the plan if necessary after careful evaluation of it.

In short, a wise administrator encourages teachers to:

1. Do something constructive about individual differences in all areas of the curriculum.
2. Use self-selection as the basis for trying different plans, in successive years if necessary.
3. Be creative in the use of sound methods and procedures.
4. Search for new ideas in professional books, magazines, teacher's guide books, and in the classrooms of other teachers.
5. Share ideas with other teachers by active participation in group meetings of teachers and through magazines for parents and teachers.

## 5. A Hierarchy for Teaching Phoneme-Grapheme Correspondences in Beginning Reading, by Earl H. Cheek, Ph.D.\*

\*Louisiana State, Univ., Baton Rouge, La.

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For many years educators have debated the ways words should be selected for use in teaching beginning reading. Some think the words selected should be those having the highest utility. That is, those words necessary for sensible, connected discourse. Others think that the words selected should be those that are made up of similar sounds represented by similar letters. Thus, one group would teach the phoneme-grapheme options as they occur in the high frequency words while the other group would initially teach the options as though they were constants, not options. The author of this article takes the position that the same letter and/or combinations of letters often represents a variety of phonemes and that the progression of the options taught should be determined by their utility to the reader in learning to read American-English connected discourse.

What then is the progression, when words are selected in terms of utility, in which the common phoneme-grapheme options should be taught? The purpose of this study was to ascertain this progression.

### Procedures

In order to determine the hierarchy for teaching the various phoneme-grapheme correspondences at readability levels 1.0-5.0, the following procedures were utilized:

1. The *Cheek Master Word List* (Cheek, 1974) was used as the core vocabulary. This word list was developed for readability levels 1.0-5.0 by extracting words (according to level) from each of the following lists: *A Revised Core 8 Vocabulary: A Basic Vocabulary for Grades 1-8*, *An Advanced Vocabulary for Grades 9-13* (Taylor, et al., 1969); *Basic Elementary Reading Vocabularies* (Harris and Jacobson, 1972); *Word Frequency Book* (Carroll, et al., 1971); and *Computational Analysis. for Present-Day American English* (Kucera and Francis, 1967).
2. Each word selected for the Cheek Master Word List was studied for the graphemic representation of each of the phonemes. To maintain consistency in phoneme identification, Webster's Seventh New Collegiate Dictionary (Gove, 1971) was used.
3. For every level, 1.0-5.0, each phoneme was classified according to its corresponding graphemic option. These classifications were analyzed to determine the readability levels at which they occurred in the most frequently used words. This analysis provided a listing of phoneme-grapheme correspondences which appeared most frequently in words at each level.
4. The level of the phoneme-grapheme correspondences was determined by listing the total number of words containing a given phoneme-grapheme option at each readability level from 1.0-5.0 and then finding the level at which five words containing that correspondence first occurred. For example, the /a/ phoneme represented by the grapheme <a> appeared in two words on level 1.0-2.0, seven words on level 2.1-3.0, twelve words on level 3.1-4.0, and eleven words on level 4.1-5.0. Thus, it was listed at level 2.1-3.0.

### Discussion of Findings

The purpose of this study was to determine the order of introduction of the common phoneme-grapheme correspondences needed for use in decoding written words introduced in the primary

grades of the elementary schools. The investigator found that forty-six phonemes were present in the words appearing on the Cheek Master Word List.

Of the forty-six phonemes introduced, all were represented by one or more graphemic options. One of the phonemes, /yu/, occurred so infrequently that both of the graphemic options representing it were assigned to readability levels above 5.0. All other graphemic representations of phonemes were assigned to readability levels 1.0-5.0, or above 5.0, depending upon the first level at which the criteria was met.

Tables 1, 2, and 3 present summaries of the vowel and diphthong phonemes, consonant phonemes, and a hierarchy of phoneme-grapheme correspondences.

### **Implications**

The findings in this study suggest that a hierarchy for teaching phoneme-grapheme correspondence does exist in the elementary grades. This hierarchy may be used for developing a scope and sequence for teaching these correspondences at readability levels 1.0-5.0. Stress should be toward teaching those phoneme-grapheme correspondences which occur most frequently in readability levels 1.0-5.0 in the beginning stages in reading. The findings in this study further suggest that many of the more commonly used phoneme-grapheme correspondences occur in words at readability levels 1.0-5.0. Implications for developers of reading programs are that systematic instruction in sound-symbol relationships should be incorporated as an integral part of any such program.

Further findings from this study indicate that the use of a hierarchy for introducing phoneme-grapheme correspondences should enable a student to gain the necessary decoding skills which in turn would enhance the prospect of that student becoming a capable reader.

The awareness of a hierarchy for teaching phoneme-grapheme correspondences offers teachers and program developers an opportunity to develop and evaluate instructional approaches which possibly could increase the effectiveness in teaching reading. Unlimited opportunities for research are provided in order to ascertain the effectiveness of developing decoding skills based on this awareness of a hierarchy for teaching phoneme-grapheme correspondences.

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Hierarchy for Introduction of Phoneme-Grapheme Correspondences

**TABLE ONE**

Phoneme	Graphemic Options	Phoneme	Graphemic Options
Readability Level 1.0 – 2.0		Readability Level 2.1 – 3.0	
/ā/	a-e, ay	/ā/	a, ai
/a/	a	/e/	ea, e-e, ai, a
/ä/	o, a	/ē/	ea
/au/	ou, ow	/i/	ea, i-e
/e/	e	/u/	u
/ē/	y, ee, e	/ü/	ew
/ī/	i-e, i, y, igh	/d/	ld
/ō/	o, o-e, ow	/f/	ff
/o/	o, a	/j/	g
/u/	oo	/ks/	x
/ü/	oo	/əl/	le
/ə/	e, o, u, a, i, ou, o-e	/n/	nn
/b/	b	/ng/	n
/ch/	ch	/ən/	en, n
/d/	d	/p/	p
/f/	f	/r/	wr
/g/	g	/s/	c
/h/	h	/t/	tt
/hw/	wh		
/k/	c, k, ck		
/l/	l, ll		
/m/	m		
/n/	n		
/ng/	ng		
/p/	p		
/r/	r		
/s/	s, ss		
/sh/	sh		
/t/	t		
/th/	th		
/th/	th		
/v/	v		
/w/	w		
/y/	y		
/z/	z		
Readability Level 3.1 – 4.0		Readability Level 4.1 – 5.0	
/a/	a-e	/ā/	eigh
/ē/	i, ey	/ē/	ea-e, ie, ay
/ī/	ie	/i/	y
/i/	a-e	/o/	au
/ō/	ou	/oi/	ou, oi
/o/	aw	/ü/	o-e
/ü/	ou	/yü/	u
/ə/	u-e, i-e, e-e, a-e, ea	/yə/	u
/ch/	t, tch	/f/	ph, gh
/d/	dd	/m/	mm
/j/	j	/w/	u
/al/	al	/z/	es
/n/	kn	/zh/	s
/ən/	on		
/r/	rr		
/sh/	ti		
/z/	z		

## 6. Position Papers of Special Interest Group Members of IRA, on Spelling Reform, Initial Teaching Alphabets, and Word Perception.

Each member of this IRA Special Interest Group was invited to submit one or more position papers relevant to "Reading: Orthography and Word Perception" for publication prior to the annual IRA convention. As noted hereafter, these papers deal with the nitty-gritty problems of escalating reading instruction. Furthermore, they cover a wide range of topics from preparation of beginners for reading to initial teaching alphabets and reading methods, from concern with the irregularities of the English spelling system which present word-perception hazards, to meaning (e.g., referential, syntactic). Finally, these papers reflect concerns with the motivation, perception, and cognition (i.e., comprehension) facets of reading instruction as well as the basis of effective instruction: differentiation to provide for specific needs of individual pupils and the broad range of achievement within any class.

Many of these papers did not show the position of the author on all facets of the questions asked. The positions reported seem to be those in the particular aspects that interested the author.

**Dear Dr. Betts:**

**Mr. Joseph E. Brown\***

\*Hill Vocational-Academic Center, Lansing, MI.

This is a brief and informal position paper concerning spelling reform that you mentioned in an earlier letter to me.

Please be aware that the position is non-academic, emanating largely from the point of view of a 20-year working classroom teacher in English and Secondary Reading Instruction (popularly and bureaucratically referred to as Remedial Reading).

The points of view are largely self-generated, based on sincere concern, personal observation, and personal study outside the realm of formal, university-oriented academic pursuits concerning the topics of orthography and illiteracy. Bill Durr (Dr. William Durr, one of Houghton Mifflin's basal editors at the time) was my academic advisor in graduate, school days. He had little time for those interested in Spelling Reform and "Artificial Orthographies."

!My attitudes, and the points of view, came to develop from an English/ Language teacher position; and though I am not especially a Hayakawa-Rapport-Korzybsky-Smith fan, many interests arose through the Semantics-General Semantics views of such as "ETC: A Review of General Semantics" and Frank Smith's "Comprehension and Learning" and so forth. It is sincerely hoped that these two levels will not conflict (the academic-technical and the ordinary functional classroom level), but will serve to complement each other in a most worthwhile endeavor: Improved Orthography.

Most important, my views and emotions arise from daily observation of the often barely noticeable but tragic effects that a complicated and inconsistent traditional spelling system has, generation after generation, upon those who do, indeed, become illiterate directly because of the difficulty of learning our traditional way of spelling words.

There are a number of other influences, but it is enough to say that my overwhelming drive is to modify our traditional spelling system in such a way that, at the least, it does not *promote* illiteracy among certain categories of people.

By no means can the subject of Spelling Reform be discussed in a few paragraphs. A few high

points can be touched upon, however.

If one might join forces with those interested in an alternative to traditional orthography, an improved, intelligent, logical, consistent orthography should be the goal of all educators. The word "reform" might well be used very selectively because of its general semantic implications; otherwise an improved spelling system is attainable, with a logical, economical, usable symbols system, and with a very clever, patient strategy to implement the system.

There is no point in enumerating all the noteworthy people who have attempted and encouraged spelling reform in American and other English-speaking histories. Nevertheless, it is a useful starting point to be reminded of one of the earliest and most crucial attempts, time-wise, in relation to the establishment of our general language modes.

A ten-month exchange of ideas between Dr. Benjamin Franklin in Philadelphia and Noah Webster, starting in Dec. of 1786, very nearly resulted in a simplified and logical spelling system at a most critical time in American history when it could have been accomplished most easily. It came this close to happening, as revealed in a letter from Webster:

"I am encouraged by the prospect of rendering my country some service, to proceed in my design of refining the language and improving the general system of education. Dr. Franklin has extended my views to a very simple plan of reducing the language to perfect regularity."  
(Ford, 1, 110)

The letter was written to President George Washington, dated March 31, 1786. The "refining the language and improving the general system of education" referred to a "sufficiently regular" orthography designed by Benjamin Franklin. Unfortunately, however, it was to Webster's final advantage as a schoolmaster, lecturer, linguist, lawyer textbook writer-publisher, and lexicographer to retreat what was "orthographical orthodoxy" even then. But he did try a few modest forms of simplification: *catalog*, *color*, *center*, *traveler*, and several more were successful. But the potential collaboration between Webster and Franklin, both successful publishers, dissolved, and our general language styles, including our style of orthography, became set in concrete, to be schoolmastered into our souls for nearly 200 years. Since then, any attempts at spelling reform have met similar ends. Even the Chicago *Tribune* gave up after a few years of trying to introduce simpler spellings.

Yet, an improved alternative spelling system is still a must. Traditional orthography is a known cause of illiteracy.

Here are some of the factors suggested for consideration:

1. The symbol system must be modern, simple, and well-designed.
2. The strategy for implementing a new spelling system must be comprehensive and very carefully planned.
3. The implementation process must be gradual, in the evolutionary style, rather than in a revolutionary "reform."
4. Whatever form the new system takes, it must appear widely in print-universally. For this reason it must involve languages other than English, for total value.
5. It must be widely acceptable – and usable – by both academics and schoolmarmms alike, and be promoted by them.
6. It must be economically acceptable, i.e., in the printing and publication of billions of words, it must not use two characters (thus twice the ink, time, and labor) when one will suffice. Further, it must utilize only traditional alphabet characters that exist on every typewriter keyboat in any type font, and on any computer keyboard; otherwise it would not be feasible in a practical business

sense. No keyboard must be changed.

7. Finally, acceptability is critical. There must be no orthographic shock in the new system. Specifically, for example, the new orthographic system must be as closely related visually and sequentially as possible to familiar traditional spellings. It is suggested, among many examples readily at hand, that the /er/ and the /or/ be maintained to represent phonemes simply because they are familiar, frequently used parts of traditional spellings in many words, and that the "uu" combination not be used because it never appears in traditional spelling. The "uu", and others, represent linguistic and orthographic shocks to people schooled for lifetimes in traditional spellings.

Indeed, spelling reform, perhaps under a more moderate title like simplified spelling, can be accomplished. In terms of its universal cultural and educational values, it might compare handily with the discovery of fire, lunar landings, and other important advancements.

### **Position Paper, by Emmett A. Betts, Ph.D., LL.D. Word Perception: More Than Phonics**

The teacher who helps a pupil discover the relationship between the sounds of speech and the letters and punctuation used to represent that speech, is developing phonic skills.

When you help a pupil discover how words function in a sentence (grammatical meaning), you bring phonics to a higher level of effectiveness.

When pupils are helped to relate words to relevant dictionary meanings, phonics is elevated to word-perception skills.

*Word-perception skills, one hallmark of today's reading instruction, need to be developed at all grade levels.*

Word-perception skills need to be developed so that pupils can practice these skills automatically during the reading act. This automatic use of skills frees the pupil's mind for thinking about what he reads.

#### **Primacy of speech**

Speech is basic to both word perception and comprehension. When you base reading instruction on the primacy of the spoken word, you consider how a word or phrase *said* before you teach the letter groupings representing that word.

The *intonation* or melody of speech is also important in word perception. For example, the word *can* is stressed in *a can of apples*, but it is unstressed to /kən/ in *I can do it*.

In reading, the process (word perception and interpretation of intonation) and product (comprehension) cannot be separated.

#### **Phonics Plus**

Achievement in reading is more than the use of phonic skills alone. In the past, phonics was taught during a separate period. Today, the development of word-perception skills in all reading/study activities should replace isolated phonics instruction. Viewed in proper perspective as part of word perception, phonics becomes an integral part of the total act of teaching reading.

**Position Paper, by Betty D. Roe, Ph. D.\***

**Should phonics be taught in isolation from reading in context? Why or why not?**

Prof. of Educ., Tennessee Tech. Univ., Cookeville, TN.

Phonics should not be taught in isolation from reading in context because, for many words in the English language, context affects pronunciation. A simple word such as "bow" cannot be pronounced with assurance until its sentence and/or paragraph context has been checked. [Example: (1) She tied the ribbon in a bow. (2) You must bow to your partner and then to your corner.] Presenting this word in isolation and teaching students to respond with one pronunciation, based upon the phonic element being taught at the moment (vowel) digraphs or diphthongs), can cause problems when the students meet the word in context and have not been taught that there are two possible pronunciations for the spelling. They are likely to pronounce the word incorrectly, producing a nonsense sentence, resulting in lack of comprehension of the passage. Students should be taught to apply phonics generalizations to unfamiliar words found in context, check to see if the resulting sentence makes sense, and try other alternatives if no meaning results.

**Position Paper, by Patrick Groff, Ph. D.\***  
**Is the Idea of "Sight Words" a Valid Proposition?**

\*Prof. of Educ., San Diego St. Univ., San Diego, Ca,

If we are to further improve the teaching of beginning reading, we must discontinue the use of the term, "sight words," as this purported phenomenon commonly is described in advice given to teachers. It is often said that a sight word is an unfamiliar word which beginning readers learn to identify without making any analysis of its constituent letters. Supporters of this idea claim that there are hundreds of words which cannot be recognized through the use of phonics and structural analysis aided by context clues. Supposedly, these words are ones the child "memorizes" as "wholes." There are no research findings to support this misleading notion. This supposition also is suspect from a rational examination.

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**Position Paper, by Emmett Albert Betts, Ph.D., LL.D.**  
**Word Perception: Mediated Response Learning**

In word perception, certain obscure and unobservable processes operate between the stimulus (e.g., the word *cat* or the word *autochthonous*) and the response. In responding to the word *cat*, the beginner may call on preestablished associations with *at*, *hat*, *cap*, or cues from one or all three words. For the more complex word *autochthonous* /'o-, tāk-than- əs/ the experienced reader may call on a number of pre-established associations: relating the number of places in which vowel letters occur in the word form to the probable number of syllables; relating the phonogram *au* to the sound /o/, the phonogram *ch* to the sound /k/, the phonogram *ous* to the unstressed syllable /-əs/; and so on. These internal, or psychological, processes are often called mediating (relating or intervening) responses.

Past learnings tend to mediate present learnings. The pupil who has systematically studied the *at-cat-hat* spelling pattern tends to bridge the gap between the stimulus *sat* and the response /'sat/,

providing of course, he relates the sound /s/ with the letter *s*. The systematic addition of words fitting this pattern (e.g., *bat-rat*, *cap-tap*) controls, in a sense, the mediating process and increases predictability of responses.

The pattern *bar-car-far-jar-star* has structural (linguistic) meaning for the pupil who has studied it systematically. It is this structural meaning groupings by spelling patterns – that is crucial to the mediating, or relating, process.

When the beginner in reading learns to tell the difference between letters (T and L or b and d) or between the spelling patterns of words (*sat* and *sit*), he is discriminating. Before this time, he has learned to discriminate between speech sounds, between referential sounds (e.g., *mother* /'mʌθ-ər/ and *daddy* /'dɑd-e/) and the emotive sounds *ah* /'ɑ/. This discrimination learning involves a complex of skills prerequisite to listening and talking, and later, to reading and writing. Hence discrimination becomes a mediating response.

When the pupil generalizes regarding the relationship between the phonogram of *oi* in *oil* and the sound /oi/, he is using a powerful mediating process. This generalization process operates for the *he-me-we*, *my-by-shy*, *day-may-say*, the *not- lot- got*, *oat-boat-goat*, *eat-meat-feat*, and other major and minor spelling patterns.

Commonly used words tend to be short words (e.g., *a*, *an*, *and*, *the*). In fact, there is some evidence indicating that about 50% of these common words are one-syllable words. But the other half may have two or more syllables (e.g., *again*, *exit*, *strengthen*). The less common words may be words of many syllables (e.g., *repatriate*, *microevolution*, *telecommunication*, *antipatheticalness*, and *superseptuaginarian*). Certainly multisyllable words appear to be more complex stimuli than one-syllable words. Therefore, they require greater cue search, more complex groupings into syllables, and so on-and it appears reasonable to assume that complex processes of mediation are required for their perception.

The complexity of mediating processes is increased by differences among individuals. Some beginners experience more difficulty in learning word perception skills for emotional and a number of other reasons. A few pupils have difficulty with closure – for example, given the sound of *oi* in *boil*, they are unable to complete the sound sequence for the word. These differences in abilities of pupils to use various mediating processes are a class of important variables, often called intervening variables.

**Position Paper, by Betty D. Roe, Ph.D.**  
**Why is it desirable for students to become automatic decoders?**  
**What is one effective method for helping students to do so?**

\*Prof. of Educ., Tennessee Tech. Univ. Cookeville, TN.

There is a need to help students become automatic decoders so that their attention can be applied to the task of comprehension. Students who are struggling to recognize words have little attention left to devote to discovering meaning, and yet comprehension cannot occur unless words are recognized and understood.

Samuels suggests the method of repeated readings as a way of building fluency and overcoming the decoding barrier. This method – rereading a short, meaningful passage repeatedly until a particular level of fluency is reached has been successful in a reading clinic setting with intermediate grade and junior high school students. The students improved in both word recognition and

comprehension and had a good attitude toward the technique.

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### **Position Paper, by Dr. Josephine Wolfe\***

#### **What is the relationship between word perception and concept development?**

\* Jenkintown, Pa.

There is a clear relationship between *word perception* and *concept development*. Word perception is a process of interpreting and understanding printed words resulting in the labeling of concepts. The ability to think as needed comes first. However, word forms or other visual symbols are imperative if the writer is to convey his ideas to the reader. Essential to the perception process are meaning aids such as anticipating meanings of words from pictures, from context, and from structure as well as extending word meanings by antonyms, synonyms, homonyms, homographs, and words with multiple meanings.

These aids give the reader a check on the accuracy of his association with a symbol. In other words, to perceive a word is to recognize it, to know what it means, and to use it – the end development being comprehension.

### **Position Paper, by Betty D. Roe, Ph.D.**

#### **What are some differences in the ways that good readers and poor readers identify words? Why may these differences exist?**

\*Prof. of Educ., Tennessee Tech. Univ., Cookeville, TN.

Good readers tend to attack words more flexibly than do poor readers. Good readers vary the approach to a word (phonics, structural analysis, or contextural analysis) depending upon the situation, whereas poor readers tend to use a single approach. This may be because the good reader has mastered more approaches. Some teachers focus on a single approach (frequently phonics) for poor readers, while giving more techniques to better readers. Better readers are also more willing to try alternate pronunciations for graphemes than are poor readers, who tend to try only one possibility. Once again, this may be because the poor readers have not been taught to have a "set for diversity", and the better readers have.

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## Position Paper, by Emmett Albert Betts, Ph.D, LL.D. Speech and Word Perception

There are three reasons why a teacher needs some basic knowledge of speech sounds:

1. *On-the-spot-help*. When a pupil asks for help on the word *squash* during his silent reading, the teacher asks, "What part do you need to know?" If the pupil points to *squ* and has not studied the /skw/-*squ* relationship, the teacher says, "That sound is usually spelled *skw*. Now what is the word?"

If the pupil points to the *a* of *squash*, the teacher says, "The sound is /ä/, *ah*. What is the word?"

This procedure has several merits. The pupil is told only the sounds represented by the letter(s), not the whole word. Telling the child the word teaches him nothing, leaving him helpless when he sees (squ)irrel, sw(a)mp or some other "new" word. On the other hand, when the pupil is told only the unknown sound-letter relationship, he has to close the word by fitting the sound into the sequence of sounds for the word – as /skwäsh/. Finally, the pupil makes a note of the word *squash* for study in a follow-up activity with other pupils who need the help and, therefore, are ready for it. In this group, the pupils may study *quick*, *quack*, and other /kw/ -*qu* words as well as *squash*, *square*, *squeak*, *squeeze*, and other /skw/ -*squ* words – if the help is needed on the initial consonant blend. Or, they may study *squash*, *swallow*, *swamp*, *quality*, and other words with the vowel sound /a/.

2. *Maturity in speech production*. A knowledge of the sounds of speech helps the teacher to estimate the young pupil's achievement in speech. While children learn to articulate the consonant sounds in *boy*, *pa*, and *ma*, at an early age, (about 3 to 4 years), they do not learn to articulate the consonant sounds in *zoo*, *Sue*, and *raw* until a much later age. A knowledge of language development, especially speech reproduction, makes it possible for the teacher to identify the sounds and to make decisions regarding the sequence in the development which is to be expected.

3. *Regional differences*. Since the American population is becoming increasingly mobile, a Bostonian teacher may have pupils from Utah, Iowa, Tennessee, and other speech regions. In this situation, the teacher needs to be aware of regional differences in speech – of the pupil from the south who says *far* for *fire*, or *fire* for *fair*, of the pupil from Iowa who says *water* /wot-ər, wat-ər/ with an *ah* sound rather than an *aw* sound.

In parts of New York City, speakers say *singer* with two different *g* sounds as in *finger* and *longer*. Here the variation is in the consonant rather than the vowel sounds.

Hence, when the teacher gives on-the-spot help, she needs to know the child's possible pronunciation of the word.

In conclusion, each teacher needs to be aware of his or her own regional speech because there is no standard American English speech. Furthermore, there is a need to be aware of both regional differences and achievement in the production of speech sounds. Reading is, at least in part, the decoding of writing (orthography) into speech.

**Position Paper, by Jack Haynes, Ed.D.\***  
**Informal Reading inventories: do they help undergraduate students understand word perception processes?**

\*Lakeland, FL.

Teacher educators who work with undergraduate students in reading will find the informal reading inventory an excellent vehicle for helping students acquire an understanding of the word perception behaviors children exhibit during oral reading.

The simplicity of the informal reading inventory requires minimum training time before introducing students to firsthand experiences working with youngsters. The instrument encourages student educators to make careful observations and systematically record children's reading behaviors in auditory and visual memory of words, use of the sound-symbol system, use of structural elements, the use of syntactic clues to predict and confirm word choice, and intonation in oral reading.

The inherent problems with validity and reliability must be thoroughly and critically examined when using the informal reading inventories in this manner. In addition, considerable attention needs to be devoted to problems in scoring word perception errors. Preservice reading education should emphasize that not all word perception errors are equally disruptive of meaning; i.e., the omission of a structure word should be scored differently than the mispronunciation of a function word. Repetitions, omission of articles, or consecutive errors of the same type can be counted as one error even though they occur more than once. Dialect variations from the text need not be counted as errors when they do not interfere with meaning.

To achieve a desired level of competence, undergraduate students must be given ample opportunity to work directly with children in a diagnostic setting. This experience will help them learn to respond to the effort being made by the reader and gain proficiency in scoring and interpreting miscues.

However, the greatest value in using the informal reading inventory is that the procedures employed may be easily adapted for informal use with daily classroom reading activities.

**Position Paper, by Lou E. Burmeister, Ph.D.\***  
**Should an effort be made to teach meanings and functions of morphemes?**

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A preliminary examination of a random sample of words taken from 16 books at each grade level from 2-6, equally distributed among the following content area subjects: Language Arts, Science, Mathematics, and Social Studies – suggests that certain specific morphemes and types of morphemes (prefixes, free roots, bound roots, and suffixes) appear with high frequency at different grade levels. This may suggest to some educators that a deliberate effort be made to teach the meanings and/or functions of these specific morphemes as part of an integrated word analysis and/or vocabulary in context program when content area subjects are being taught. . . A matrix showing these morphemes (as distributed in specific content areas and at specific grade levels) will be available at the IRA conference in Chicago together with some suggestions of ways of teaching them.

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**Position Paper, by Robert L. Trammell, Ph.D.\***  
**Why is it so hard to write a good R-controlled vowel rule?**

\* Florida Atlantic Univ., Roca Raton, FL.

It is not surprising that educators have not succeeded in writing very useful or meaningful rules for *r*-controlled vowels. The situation is so dialectally complex and various that even linguists and phoneticians are not in agreement on all points, even if we limit ourselves to regional dialects of standard English. Phonetically, vowels before /r/ do take on various degrees of "r-coloring" which may make the identification of the vowel phoneme difficult, or even arbitrary. For example, the /o/ of *horse* and /ō/ of *hoarse* may, in some dialects, be merged into a single sound half-way between /o/ and /ō/ for both words. On the other hand, both words may have /o/, or both may have /ō/ depending on the regional accent. In all three cases, the difference between /o/ and /ō/ before /r/ has been "neutralized", making *horse* and *hoarse* homonyms for those speakers with one vowel sound (/o/, /ō/ or the half-way-between sound) in both words.

Another type of r-coloring which creates perceptual difficulties in vowel identification is the occurrence of "centering diphthongs" in some standard English dialects. Certain vowels and diphthongs may add a glide to the schwa position (a central articulation) before syllable-final /r/, e.g. /hiər/ *here*, /pær/ *pair*, /fiər/ *fire* and /āuər/ *our*. At the phonetic level, the vowels become new diphthongs and the diphthongs become triphthongs, which makes equating them with particular non-r-controlled sounds difficult.

Since these problems do not occur in all dialects, r-control phonics rules which are correct for one speaker may not be correct for another. But the question rarely arises, because adults tend to hear other speaker's *r*-controlled vowels in terms of their own speech. Children are more phonetically perceptive and may be confused by a rule which contradicts what they hear.

While the situation is complex, a little knowledge of r-coloring, neutralization, centering diphthongs, and standard English dialectology would go a long way in improving the writing and teaching of *r*-control rules.

**Position Paper, by Robert L. Trammell, Ph.D.\***  
**Are all vowels before R really R-controlled?**

In standard English dialects vowels before /r/ may follow, depending on the word and dialect, the regular phonics patterns; and thus, they are *not* *r*-controlled for many speakers. Only pronunciations of vowels before /r/ which violate the regular patterns are truly *r*-controlled pronunciations. In order to determine whether a vowel is *r*-controlled or not, compare the sound of the vowel before /r/ to the sound of the vowel in a similar word which follows a regular phonics pattern, e.g., *tire/tide*, *boar/boat*, *moor/moot*, *our/out*, *hear/heat*. If the vowel sound is the same in both word, the /r/ is not controlling the vowel. If the vowel starts as the same sound in both words but ends as a centering diphthong (i.e. with a little schwa) in the *r*-word, the pattern is still maintained, because this type of *r*-coloring is phonetically automatic. In my pronunciation, only *hear* is *r*-controlled, because it has /i/ not /ē/. For other speakers, more of the words may be. In the pairs *far/fad*, *for/fop*, *pair/pain*, the vowels will be different for most speakers, and hence, *r*-controlled.

Some speakers' pronunciation of the following words will follow the patterns while others will be *r*-controlled:

Long vowel, silent e:

Regular pattern: cōre, hēre, hīre, befōre, cūre, pōōr

*R*-controlled: /ker, hir, befor, kyur, pōr/

(Long *i* is generally immune to *r*-control.)

CVC:

Regular pattern: mǎrry, mērry, Mūrri, hūrt, fūr

*R*-controlled: /merē/ for *marry*, /marē/ for *merry*,

(Short *u* is generally immune to *r*-control)

Open-syllable, long-vowel:

Regular pattern: Māry, pūrify, stōry, Mōōrish

*R*-controlled: /merē/ or /marē/ for *Mary*, /pyurifi, storē, murish/

Long-vowel digraphs:

Regular pattern: āir, hēar, bēer, bōard

*R*-controlled: /er/ or /ar/ for *air*, /hir, bir, bord/

In many cases the *r*-controlled vowels fall into *r*-controlled patterns or phonograms. The pronunciation of some of these phonograms differ in a predictable way according to the dialect of the speaker.

Consider:

-ar as /ar/ – *far, car, party, star, tar, bar*

-are as /ar/ or /er/ (depending on the dialect)-*care, stare, scare, rare*

-or as /ōr/ or /or/ (depending on the word and/or dialect) – *for, short, or, fort*

-er and -ir as /ər/ – *her, after, herd, sir, first, fir*

## **Vowels + r: Methodology, by Katherine P. Betts, Ph.D.\***

\* Florida Southern College, Lakeland, FL.

An effective methodology for teaching pupils vowel + r: situations in word forms derives from these premises:

1. The phoneme /r/ is a consonant *only* in initial-syllable position (e.g. (*r*)*un*, *co*(*rr*)*ect*, (*br*)*ing* in spoken words. When pronounced in isolation, /r/ shifts to /ər/ a vowel.
2. The phoneme /r/ after any vowel in the same syllable is also a vowel, and therefore, with the adjacent vowel, is considered a centering diphthong (e.g., ar /är/ in *park*).
3. Words to be learned are identified by the pupil from a selection at his instructional reading level and are returned to that context with their meanings (syntactic and semantic).
- d. Pupil *need* to learn is a potential motivational factor assuring his participation in instruction.

Therefore, instruction for these and other word-perception skills begins with helping the pupil discriminate sounds as *pronounceable* units in spoken words (e.g., saying the whole word *park*, the last part – V+C – p(ark), the first part – C+V – (par)k, the vowel p(ark), and the whole word again, *park*). The procedure is repeated with the written word *park*, facilitating the chunking of graphic units representing phonemes. Next, by using initial and final consonant substitution (e.g., *park-dark-dart*), guided by the teacher to maintain a consistent pronunciation of *ar* in these words, the pupil can make a useful generalization for the analysis of similar words (e.g., *harm, farm, cart*), including the development of meanings in every instance. In summary, this methodology – phonics countdown – has several applications: enhancing auditory discrimination skills (e.g., vowel

sounds embedded in syllables), relating phonemes to the graphemes representing them, chunking graphic units with transfer potential to the analysis of other unknown words. Thus, we foster independence in the pupil, guiding him to eventual automatic use of word-perception skills and freeing him to attend to the message, to comprehend – the purpose of reading, after all!

**Position Paper, by Robert L. Trammell, Ph.D.\***

**What is the relationship between syntactic meaning and word perception?**

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Syntactic meaning makes word perception easier, because following the syntactic pattern enables the reader to assume the right mental set for predicting what part of speech is likely to be next, greatly reducing the number of possible words to be perceived at that point. The fact that we can silently read and understand:

The none tolled hymn she had scene  
a pare of bear feat inn hour rheum

in spite of the "wrong" spellings is attributable in part to the power of syntactic meaning as an aid to word perception. The syntax tells us the spellings are wrong and enables us to perceive the correct meaning by leading us to the appropriate homophones (*nun, him, seen*, etc.)

Word-callers with little or no comprehension are not sufficiently using syntactic meaning, which would help them to perceive individual words more quickly and enable them to read fast enough to "chunk" for long-term memory storage.

**Position Paper, by Robert L. Trammell, Ph.D.**

**How do initial teaching alphabets compare and are they necessary?**

Initial teaching alphabets may be compared as to the number of symbols and the degree to which the symbols facilitate transfer to the traditional spelling system. Unifon is almost a perfect one symbol-one sound system, but the symbols for most of the vowel sounds and some of the consonant sounds have little or no transfer value to traditional spellings or letters. The lack of a lower case is also a problem in transferring to regular spelling and the use of all capitals destroys the word configuration patterns established with L. C. ascenders and descenders. Finally, three pairs of Unifon letters are mirror images of each other-increasing the likelihood of reversals in perception and writing. The i/t/a has more symbols than there are sounds in English, but most of the symbols are related to traditional spelling patterns. Diacritical marking systems work better with vowels than with consonants or consonant-vowel combinations which indicate a consonant sound (e.g., ocean). The transfer value of such systems is great, however.

The wisdom and necessity of initial teaching alphabets is questionable, since many one-symbol-one-sound relationships can be established by the careful selection of words in traditional orthography; also, the spelling system to be learned is based on patterns and morphophonemic relationships as much as it is on one symbol-one sound correspondences. The three different pronunciations of "y" in *cycle, cyclical, gym, my* and *funny* are perfectly predictable by spelling rules and patterns. i/t/a spellings hide these patterns. The i/t/a spellings for *fætæ, fætugraf, futogrufee* present three recognition problems for the morpheme "photo," and two for "graph," destroying the semantic unity of the traditional spellings.

## **Position Paper, by John Henry Martin, Ph.D.\* The use of an initial teaching alphabet**

\*Windjammer, Stuart, FL.

Tracing the changes introduced and made by Pitman and Dewey in constructing an initial learning alphabet, this paper (*SPB*, Winter, 1981) presents a new alphabet based upon the results of four years of research in beginning writing and reading with kindergarten and 1st grade children. This alphabet eliminates the new letter forms of Pitman, drops the ligatures in the digraphs and diphthongs and uses single graphemes to designate the two sounds each of "r", "z", "th" and "oo." Unlike Dewey, the macron is used to distinguish the long vowel sounds from the short vowels, which are presented without diacritics. 42 phoneme-graphemes are employed in harmony with a simplified form of the pronunciation key found in the Thorndike-Barnhart dictionaries. Thus all the graphemes are instantly recognizable and are useable for life.

These simplifications are the result of research based upon the intensive observations of children learning to write as the introductory process to learning to read. Children are encouraged to change to traditional spelling when it differs from the phonemic as rapidly as their reading discovers for them the conventional ambiguities and seeming irregularities of regular orthography. Thus they write the sound of "oo" in *you, through, threw, to, two, too* and *glue* as "oo" until they "see" the "way it looks in books." We found once more that the use of simple consistency in the material placed before children will facilitate their understanding of the concept and the mastery of the skill. Finally, the paper rejects the need for absolute consistency between all phonemes and their graphic representations as a dogmatic overstatement of children's learning needs. This finding eliminates the need for new alphabetical symbols and unusual digraphs irritating to the sensibilities of parents and teachers whose acceptance of the process is critical to its adoption and maintenance.

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[*Spelling Progress Bulletin Summer 1982 pp15-17 in the printed version*]

## **Position Paper, by Robert L. Trammell, Ph.D. Why do linguists resist a major spelling reform for English?**

Since the pronunciation of English will continue to change over the centuries, many "phonetic" spellings would become irregular in time. Any reform would only be temporary. The choice of one English speaking country and one standard regional dialect within that country as the model for "phonetic" spellings would be difficult to agree on.

The present spelling system has certain advantages that would not exist in a more phonetic system. Speakers of very different dialects can communicate in writing without being able to readily understand each other's accents. Reading for meaning is facilitated in three areas by the present system. Related words keep the spelling of roots and stems the same even though the pronunciation

changes (c.f. *photo, photograph, photography*). Longer spellings (e.g., *though, through*) are easier to perceive than shorter ones (*tho, thru*) because of the redundancy of the former. The written language is often less ambiguous than the spoken (The book was *red/read*).

In short the principal benefit of a major spelling reform would be the improved spelling for a relatively small number of people who speak the chosen dialect. We must better understand what is regular, predictable, and advantageous about the present spelling system before launching any major reforms.

Minor reforms, such as marking stress and indicating phonics syllables with hyphens, would take much of the ambiguity out of the pronunciation of vowels.

### **Position Paper, by Valerie Yule\* On Spelling Reform and the i.t.a.**

\* Dept. of Psychology, Univ. of Aberdeen, Scotland.

Spelling reform has been held back by many false assumptions. The most serious are that: armchair argument is sufficient. without experimental testing; the only way forward is backward to a purely fonemic spelling; English spelling compensates for being difficult to learn by being best for the skilled reader through its redundancies and variety of distinctive visual patterns; that it can only be introduced through schools or official decree; that economic costs of change would be huge; that everything now in print would be lost to future generations.

I have been experimenting with what happens if those assumptions are tested.

1. The most dramatic finding is that adults *improve their reading speed* within five minutes when the printed word is 5% shorter through the omission of letters that serve no apparent purpose:

*have, give, are, were, parallel, recommend, embarrass, learn, research, answer, quick, miscellaneous, through.*

This offers a potential saving of millions of dollars and pounds through economies in printed matter, time and energy for input of unnecessary letters, storage, and decoding effort. Experiment suggests that the most effective way to introduce changes are simply to use them randomly as acceptable alternative spellings, without prior training of the reader, preferably leaving the first and last lines of paragraphs unchanged until familiarity is established. Teletext, videotext and microfiche are places to start. This finding refutes the belief that redundancy is an advantage in spelling; on the contrary, reading is easier with less print to process, fewer spelling patterns and misleading covert fonological decision points, less complexity.

2. *Experiment in optimum spelling for skilled readers and learners*, including second language learners, is showing that maximising representation of morfemes helps learners' vocabulary extension and skilled readers' immediate semantic access. (Using the technique of more consistent use of 'magic e' to indicate preceding long vowels, and its avoidance to indicate preceding short vowels – e.g. *finish/ infinit /finel /finite*.)

John Beech of Ulster has shown that adults can read a rule-based spelling at normal speed after

reading 6000 words of text, although they still do not regain normal speed after 8000 words of text in a pure fonemic spelling (WES). I am finding that *the average adult* approaches normal speed or even better after under five minutes practice with a morfo-fonemic spelling with fewer rules. (Massed practice produces slowing through reactive inhibition – separated trials are best to promote familiarity.)

On reading tests using this morfo-fonemic spelling in running text, slow and backward readers tend to show marked improvement after the initial trial; good readers tend to leap ahead by several 'years' of 'reading age'; average readers vary more – when they have learnt by rote, some are quite non-plussed, and some girls refuse even to attempt what is unfamiliar.

3. *Present spelling would remain readable* to those accustomed to a morfo-fonemic spelling. Experts in backward compatibility, which is required of most advances in information technology today, indicate that reading running text remains possible, though at a slower rate, and speed improves rapidly – especially for the good readers who are those most likely to want to 'read in the past.'

4. *Shift of spelling set and confusability of alternative spellings.* Experiment is disproving this bogey too. Conclusion: Investment in research, development and implementation of improvement in spelling technology is demonstrably warranted, particularly by the modern communications industries-so that English spelling no longer burdens our economy by exacerbating educational and social problems and reducing the efficiency of almost every other area of communication.

### **Initial Teaching Alphabets**

Two assumptions have limited progress in initial teaching alphabets:

1. That they can be designed without prior research into what would be the optimum spelling for learners in practice.
2. That basic literacy is first acquired in the initial learning medium, and then follows the awkward transition conventional orthography.

I am investigating what happens when these assumptions are questioned.

1. Optimum spelling for learners – derived from recent research in cognitive psychology of spelling (c.f. Frith, Kavanagh, and Venezky), cross-cultural research requiring more investigation, observation of childrens' 'natural spelling', and testing the possibilities of using alternative forms of standard reading tests of text.

A purely fonemic spelling is certainly easier for children than present orthography, but it is still harder than one might think, especially for children who are learning-disabled, with problems in auditory discrimination or general linguistic skill. Visual patterns can be clumsier than present spelling for polysyllables, increasing coding difficulties with letter strings.

The optimum spelling appears to be the shortest possible that can still carry enough information for fonological decoding, and can be reasoned out according to the simple sort of rules that children use in their own linguistic generalizations at early school age. It should be sufficiently connected to the conventional orthography for learners to be able to continue practising their skills outside the classroom.

2. *'Immediate transition' with an initial learning medium.* I am experimenting with 'Teach Yourself to Read Manuals' for maximum learner control of his own progress. The theoretical basis is

cognitive – that is, unless learners develop from the start reading strategies that include comprehension and use of context clues, they may fail to develop those later. Fonics and look-and-say are tools to make this possible, as well as a specific technique of 'reading with' a competent reader, which merges from earlier 'being read to', and merges into 'reading to' and independent reading, so that from the start children are reading content at their mental age level at a reasonably fluent reading speed, governed by the child himself. Right hemisphere abilities (the dyslexics' asset) are utilised in visual-structure charts always visible on the wall and in books, for use like maps.

First books can be 'multi-level' or 'dubl-decker,' with cribs – that is, can span from GO to 8 year R.A., with three levels of worthwhile content even on the same page (e.g. 3 versions of Cinderella) so the learner can use the level he prefers and revoke the others. Or on the same page, especially at the beginning, there may be the same text in several steps of transition from initial teaching print (and/or the child's own dialect, if required) to initial teaching spelling to the national spelling, based on psychological principles of language learning that are found to be used intuitively by excellent spellers and linguists.

Color or bold type is also used at different points to cue learning strategies:

- distinguishing nouns and verbs to show sentence structure,
- distinguishing vowels to show word structure,
- distinguishing initial letters or digraphs to prevent reversal habits,
- distinguishing 'spelling traps' to raise decoding confidence and speed,
- marking the words a poor speller has read, to show progress and cheer him up.

Ideally, the optimum spelling for skilled readers and writers should also be introduced to learners in this way too.

### **Position Paper, by Newell W. Tune, Editor SPB Spelling Reform and the i.t.a.**

I think that by now educators should be convinced that the main cause of illiteracy among English learners is the irrational, confusable, conflicting English spelling. If this were simplified so that English would be easy to learn, it would result in a much better percentage of literate English learners. But I realize that international agreements must be made with English-speaking countries as to the kind of reform or simplification, and plans for putting the agreed system of .spelling into use. This may take many years – and we cannot afford to wait for this to happen. The need is urgent.

There is something that we can do now. There is a system of spelling that has already been shown to be easy to learn to read. Teaching reading in Pitman's i.t.a. has had the test of classroom experimentation and found to be very successful. I'm sure you are aware of the Bullock Commission's Report that said (in essence) that the conclusion was reached that the best way to teach reading is not by starting with conventional spelling but by the use of the initial teaching alphabet.

I have heard of only one serious criticism of the use of Pitman's i.t.a. – that when a pupil starts to learn via i.t.a. and is moved to another school where they are learning via conventional spelling, there is a considerable setback. Conversely, when a pupil who is learning via conventional spelling

transfers to a school that uses i.t.a., he finds he is away behind the i.t.a. learners and must make a strong effort to catch up. The solution to this problem is to make the use of Pitman's i.t.a. universal so that all schools are using it and then transfers from one school to another never encounter that problem.

If you are acquainted with the *Early to Read* series of i.t.a. primers by Mazurkiewicz and Tanyzer, you will know that the transition to Traditional Orthography is programmed in Book 8 so that it is done gradually and easily – thus minimizing the set-back that sometimes occurs with the transition.

I am convinced that the universal use of Pitman's initial teaching alphabet would be a tremendous benefit to the teaching profession and to the eradication of illiteracy. Let's take advantage of this opportunity to make real progress in educating our children and foreigners.

**Position Paper, by Leo G. Davis.\***  
**The Dictionaries as a Start for Change.**

\*Livermore, CA.

Spelling reform is for beginners who have no spelling habits to break, rather than for laymen who have a practical degree of literacy. Thus revised spellings should be taught in textbooks – beginning with dictionaries. Contrary to prevailing opinion, our dictionaries do not dictate our orthography – they merely record most common spellings. However they are in position to take the initiative in this field.

So many of us habitually left out the u of "labour" that American lexicographers now list "labor" as the entry word – and define "labour" as obsolescent British.

There being no law against it, lexicographers could take the lead in stabilizing the alphabet – instead of leaving it to illiterates. With the "labour-labor" precedent as a pattern, they could list and define "hevy, dout, senry, etc." as entry words, and treat "heavy, doubt, scenry, etc" as obsolescent.

A subsequent edition could stabilize the most rational of homophones as the single spelling for them all. Thus "mite" would have two definitions, and "vane" three, while "rite" would have several. But when used properly, there would be no confusion as there is none in speech.

Webster lists "drout" as optional, in keeping with American pronunciation. Therefore our lexicographers could exploit the unwritten law of "Silence gives consent" by treating countless rational spellings as bonafide spellings – with their current ir-rational forms as obsolescent.

Under such a step-by-step reform, the changes would take place so slowly as to be hardly noticed and so not to be objectionable.

Obviously, truly fonetik spelling would distort the script beyond fluent recognition by oldsters who would, eventually, have occasion to work with it: Thus it is suggested that we focus our efforts on changing the dictionaries. I have written World Publishing Co., New York, publishers of the Webster's dictionary. Why not join me?

## **Position Paper, by H. Ward Ewalt, Jr, O.D.\* Vision and Reading**

\*Vision Specialist, Pittsburgh, P a.

Reading, in the usual sense, in a visual task. Anything that interferes with visual efficiency has some adverse effect on reading.

Most children with visually related reading problems have a visual acuity of 20/40 or better on the distance eye chart. Failure in the coordination of the eyes at the reading distance frequently causes difficulty in reading.

Almost fifty years ago, Louise Farrell (later Louise Farrell Davis) of the National College of Education at Evanston, Illinois wrote, "When I cannot teach a child to read in any other way, I cover one eye. Then he learns to read."

Vision in an information processing system that is based on the psychophysiological adequacy of the oculomotor mechanisms, the ranges in the focusing mechanism, the relationship between them and a high level of binocularity.

Clinical experience with thousands of children indicates that among the significant visual performance skills are:

1. The oculomotor skills, both pursuit and saccadic.
2. Dynamic visual acuity at the reading distance.
3. Adequate ranges in focusing mechanisms.
4. A well developed binocularity – as measured by the accommodative-convergence relationship, fusion, stereopsis and the fusional reserves.
5. Body imagery, laterality directionality.
6. Form vision.
7. Figure-ground.
8. Eye-hand and eye-motor coordination.
9. Speed and span of perception.

A well designed research program to measure the effect of these and other visual performance skills on learning to read and reading achievement is essential to understanding this relationship.

## **7. The Functions of the Special Interest Group, by Emmett Albert Betts, Ph.D., LL.D.**

### **Organization**

The IRA Special Interest Group 18, "Reading: Orthography : and Word Perception," is officially concerned with the relationships between orthography (spellings) and word-perception, including phonics. This group evolved from the activities of the Phonemic Spelling Council (PSC) and other antecedent organizations. Beginning in 1968, the Phonemic Spelling Council co-sponsored sessions at the annual conventions of the International Reading Assoc. When this arrangement was terminated by PSC in 1979, IRA approved the organization of this special interest group to continue the very successful co-sponsored sessions during the annual IRA conventions: Hence, the organizational meeting of the group was conducted during the 1981 IRA convention in New Orleans. Official IRA approval was given February 1982. Furthermore, the PSC Corporation had been terminated as of December 31, 1981.

Antecedents to PSC include the Spelling Reform Assoc. founded in 1876, the Simplified Spelling Board founded in 1906, and the Simpler Spelling Assoc. founded in 1946 which cooperated with the British Simplified Spelling Society founded in 1908.

### **Spelling Reform: Europe**

In his classic *Writing* (Frederick A. Praeger, Publisher, 1962), David Diringer opines that semi-phonetic writing appeared in the Near East, 'probably in Palestine or Syria':

". . . It was, historically, the last major form of writing to appear, and it in the most highly developed, the most convenient, and the most easily adaptable system of writing ever invented."

". . . It moved on, that is, toward what has been called the 'triumph' or 'conquest' of the alphabet." (p. 19)

Diringer adds: "In phonetic writing we have, for the first time, the graphic counterpart of speech." (p.23) He continues, ". . . the enormous advantages implicit in using letters to represent single sounds are obvious." (p. 24) Diringer believes that "perhaps a more dramatic example of progress in the development of alphabetic writing." (p. 19) His comment on spelling reform – in this instance Japanese script – is relevant to present-day resistance to needed reform:

"What the outcome of this modern reforming impulse will be remains, at least for the moment, uncertain. The age seems past when changes of such magnitude in the ingrained cultural habits of a great nation could be enforced overnight by decree. It is one of the more ghastly paradoxes of modern times that it has become a simpler matter to exterminate a civilian population than to change its habits; and writing, in particular, has always exhibited a certain tenaciousness and a resistance to rapid change." (p. 89)

Spelling reform has intrigued many eminent scholars. More than 450 years ago, Ikelsamer is said to have originated "the phonic method" to relate spellings to speech sounds. In 1554 and 1570, John Hart is credited with initiating concern for spelling reform to remedy "the unreasonable writing of the English toung (tongue)" William Bullokar, in 1580, called attention to the need for compatibility between a reform spelling and the Roman alphabet, one, of the causes of the vagaries of English spellings. In 1848, A. J. Ellis made "A Plea for Phonetic Spelling." In 1878, Isaac Pitman (grandfather of Sir James Pitman) added "A Plea for Spelling Reform." Sir James Pitman co-authored "Phonetic Orthography" (1937) and later, in the 1960's, published his initial teaching alphabet (i.t.a.) for use with beginners in reading.

Two renowned Swedish scholars devised proposed orthographies:

R. E. Zachrisson, *Anglica, an International Language*, Almqvist, Upsala and Stockholm, 1932.

Axel Wijk, *Regularized English*. Almqvist, and Wiksell, Stockholm, 1959.

The publications of Zachrisson and Wijk merit careful study by both spelling reformers and members of I.R.A.

The previously mentioned and other British scholars kept alive the need for spelling reform – in general, and for beginners in reading:

Isaac Pitman, "Phonotypic Spellings," *The Phonotypic Journal*, vol. 5, no. 54, 1846.

A. J. Ellis, collaborator with Isaac Pitman.

George Bernard Shaw. *Androcles and the Lion*. Penguin Books, Harmondsworth, 1962. (Note: Shaw recommended a complete rejection of the Roman alphabet used for traditional spelling.)

Sir James Pitman and John St. John, *Alphabets and Reading: The Initial Teaching Alphabet*, Sir Isaac Pitman & Sons, Ltd., 1964.

### **Orthography and Reading U.S.A.**

Paralleling the organized efforts of European scholars to improve the readability and learnability, of English orthography has been the work of giants in linguistics, psychology, and education in the United States.

Numbered among the linguists and orthographers:

Robert Hall, H. J. Ulhall, Charles Kenneth Thomas, H. A. Gleason, Noam Chomsky; Ruth Weir, Richard L. Venezky, Mario Pei, Harold B. Allen, W. Nelson Francis, Louis Foley, Charles Hockett, Ralph R. Lee, & many others,

Leonard Bloomfield's *Language* (Henry Holt & Co, 1933) placed him as a forerunner of a linguistic approach to spellings for beginning reading materials. One of his disciples, Charles Fries, made explicit the Bloomfield approach in his readable *Linguistics and Reading* (Holt, Rinehart & Winston, 1962). Although linguistics contributed significantly to an understanding of the linguistic basis of orthography, many of them lacked scholarship in orthography and in the psychological basis of word perception. Hence their efforts were minimized, to the detriment of reading instruction.

In recent years, considerable contributions have been made by competent psychologists – now called psycholinguists along with sociolinguists. In 1908, Edmund B. Huey published his classic treatise on *The Psychology and Pedagogy of Reading* (Macmillan Co.L. In 1951, Geo. A. Miller's *Language and Communication* (McGraw Hill) became a standard textbook in graduate schools. Since that time Miller has contributed enormously to the literature on psycholinguistics. John B. Carroll has made substantial contributions to psycholinguistics, beginning with his *Language and Thought* (Prentice-Hall, 1964). These and many other notable scholars on the psychological basis of reading instruction are the architects of effective teaching and learning.

Many distinguished educators supported the need for spelling reform: Dr. Melville Dewey (father of Godfrey Dewey), a well-known librarian of Dewey Decimal System fame – not a linguist – sparked the movement in the United States. J. Hammond Trumbull, Yale Univ. and president of the Amer. Philological Assoc., was the first president of the Spelling Reform Assoc., founded in 1876. Later, Nicholas Murray Butler, one of the all-time great presidents of both Teachers College and Columbia Univ., accepted the chairmanship of the Simpler Spelling Board.

Dr. Frank C. Laubach has a special place in the history of and in the current literature on spelling reform. This notable educator devised alphabets for teaching illiterates in many countries around the world. His classic *Let's Reform Spelling Now* was published by the New Reader Press, Syracuse, N. Y., 1966.

Politicians have concerned themselves with the "atrocious" spelling system throughout the U.S. republic. In 1768, Benjamin Franklin published "A Scheme for a New Alphabet and a Reformed Mode of Spelling:' He was joined by Noah Webster (1758-1843), author of a spelling book for teaching writing with a sale of 80 million copies. In 1906, Theodore Roosevelt endorsed a list of 300 reformed spellings recommended by the American Simplified Spelling Board. These recommendations were not widely adopted, although supported by the National Education Education Assoc.

### **Phonic Rules: Application/ Exception**

Probably one of the most widely quoted studies during the last 60 years is the doctoral dissertation of the late Godfrey Dewey on *Relativ (sic) Frequency of English Speech Sounds*. (Harvard Univ. Press, 1923). More recently Teachers College Press issued 2 books based on Dewey's 1923 study: *Relative Frequency of English Spellings* (1970) and *English Spelling: Roadblock to Reading*. Dewey implemented his findings through an association publication on *World English Spelling (WES)*, his *World English Spelling* (initial teaching medium), and *World English Spelling (WES) Dictionary*.

One of the meritorious scholars in elementary education was Ernest Horn. His spelling vocabulary studies led to concern with orthography. His "Phonetics and Spelling" (*Elementary School Journal*, LVII, May 1957, 424-432) was reprinted in *Spelling Progress Bulletin* (Oct. 1961, 12-13). He concluded: "When the evidence, on both the consistency and irregularities of English spelling, is critically and realistically assessed, little justification is found in the claim that pupils can arrive deductively at the spelling of words they can pronounce."

Relative to the validity, or lack of validity, of phonic rules (spelling patterns) are two studies which have served as forerunners of other studies:

Elsie Black, "A Study of the Consonant Situations in a Primary Reading Vocabulary," *Education*, LXXII, no. 9, (May 1952), 618-623.

Ruth E. Oaks, "A Study of the Vowel Situations in Primary Reading Vocabulary," *Education*, LXXII, no. 9 (May 1952), 604-615. Both reprinted in SPB, Summer 1981.

These investigations, based on the *Betts Reading Vocabulary Studies*, determined the application/exception ratios for phonic rules. It is crucial to note that the findings effectively and devastatingly challenged the value of phonic rules as a basis for word perception. For inconsistent spellings of English orthography preclude the blind use of phonic rules perpetuated by phonics zealots.

### *Spelling Progress Bulletin*

S.P.B., edited and published by Newell Tune, is the official magazine for the IRA special Interest Group 18, "Reading: Orthography and Word Perception." Since 1968, the activities of the group and its antecedent, Phonemic spelling Council, have been published herein. Indexes to 19 preceding issues may be obtained from the editor (1961-1970, and 1971-1978, price 75¢ each).

Membership in the IRA special Interest Group is \$3.00 per year; subscription to S.P.B. is \$5.00 per year. Manuscripts relevant to "Reading: Orthography and Word Perception" are solicited. Two copies of each article should be sent to: IRA special Interest Group 18, Winter Haven, FL.

## **8. Objectives of the Special Interest Group 18, by Emmett Albert Betts, Ph.D. LL.D.**

This group was organized for classroom teachers and reading clinicians with the guidance of professors of reading. Three primary concerns are (1) orthography, including the spelling system, (2) reading as a special case of form perception, (3) the relationship between writing (graphemes, or spellings) and speech (phonemes). Basic to these concerns are administrative procedures for differentiating instruction.

Word perception is one facet, not an isolated segment, of learning, interrelated with motivation and cognition (comprehension). Hence, IRA special interest Group 18 assesses the relationships between orthography and word perception in terms of reading processes (literal, critical, and creative) and specific learnings (skimming, rapid reading, and study-type reading).

Activities of members are furthered through demonstrations and presentations at national, regional, and local levels. But much of the progress is made through special committees. One of the crucial committees evaluates phonics and other word-perception methods in extant professional textbooks and learning materials. This committee also evaluates and reports on promising innovative procedures. One committee of the Special Interest Group 18 focuses on needed research, as an aid to graduate students and other researchers. Their recommendations for short-term and long-term studies are published in *Spelling Progress Bulletin*. Another committee spotlights the relationship between reading and vision. This committee focuses on visual skills required at book-distance, blackboard-distance, and intermediate points – on the psychological, physiological, and neurological factors for both reading achievers and the reading disabled.

More specifically, Special Interest Group 18, serves several professional needs:

1. To assess probable word-perception needs and hazards revealed by application/ exception studies of spelling patterns (phonic rules).
2. To DEMONSTRATE at international, national, regional and local meetings informal procedures for assessing learning needs and for preparation of instructional materials.
3. To DEMONSTRATE informal inventories for estimating achievement of word-perception skills and abilities, for diagnosing the causes of word-perception problems which interfere with comprehension.
4. To DEMONSTRATE the use of informal inventories of spelling achievement and for diagnosis of the causes of spelling errors.
5. To identify crucial factors- affective and cognitive – in word perception highly relevant to escalation of achievement in reading.
6. To explore different types of meanings crucial to cognitive closure in word perception; e.g., lexical, referential, syntactic, emotive.
7. To understand the influence of readability factors on achievement with informal reading inventories; e.g., chunking pronounceable units as *ca* and *at* of *cat*, learner awareness of specific needs and of achievement, etc.
8. To improve teachers' perceptions of pupil behavior in reading situations as indexes to achievement and needs.
9. To develop competence in observing learner behavior in directed reading-study situations, as an

individual inventory in a group situation.

10. To understand the values and limitations of criterion-based inventories and norm-based standardized tests.
11. To understand the crucial difference between "motivating" the learner and "capturing the learners' motivation" – as a basis for guiding thinking during an informal reading inventory or a directed reading-study activity.
12. To evaluate initial teaching alphabets and devices for easing the word-perception burdens of beginners in reading (e.g., how to use rational spellings for the commonest words: *one* (won), *is* (iz), *are* (at), *have* (hav), *any* (eny), *many* (meny), *does* (duz).
13. To evaluate proposed spelling reforms as a means for escalating phonics instruction via a closer fit between speech sounds and letters.
14. To consider the pros and cons of pronounceable letter, phonograms (graphic units) as *at*, *ca*, and *a* of *cat* and syllable phonograms as in *(look)ing* and *(fun)ny*.
15. To call attention to function words which tend to be unstressed in word groups and, therefore, induce word-by-word reading when phonic rules for stressed syllables are applied; e.g., *and* /an, nd, n/ or /ər/, *the* /thə/, etc.
16. To demonstrate the need to use the dictionary respelling rather than the syllabicated (for writing) vocabulary entry as a basis for a phonics program.
17. To identify the phonemic basis of word perception, i.e., the phoneme (speech sound)/grapheme writing relationships.
18. To identify the morphemic basis of word perception – i.e. the relationship between meaning units (e.g., *boy* and *s* of *boys*) and word perception.
19. To identify the values, limitations, and hazards of techniques for developing word-perception skills which contribute to comprehension:
  - a. Phonics countdown
  - b. substitution techniques
  - c. Kinesthetic techniques
  - d. Tactile techniques
  - e. Syllabication
20. To identify orthographic (spelling) cues to stressed vowel sounds in words; e.g., gemination, or doubling of the consonant letter, to indicate a "short" vowel sound as in (litt)le, (letter)er, (happ)y, adding final *e* as in *ride*, *place* to signal a "long" vowel (and in *place* the /s/ sound of *c*), and other devices.
21. To identify fruitful procedures for helping a learner with unknown words during silent reading.
22. To reveal the hazards and inadequacies of so-called "sight-word" or "tell-the-child-the-word" procedures and to identify other procedures to cope with inconsistently spelled words.
23. To translate usable information regarding orthography and linguistics into classroom and clinical practice.
24. To promote research on orthography, perception, and regularized spellings.
  - a. Evaluation of more than 50 proposals for regularizing English spelling
  - b. Evaluation of different types of respellings as self-help aids
25. To encourage studies of visual-motor skills which facilitate or interfere with word perception.

## 9. VOWELS APPLICATIONS      CONSONANTS

% use	WES	NS5	Rit	TO	NS5	Rit	NS5	WES	
3.79	a	- a	- a	band	- b̄and	- b̄ - f	- b	- b	1.84
.50	aa	- a	- a	palm	- pam	- p̄ - l	- p	- p	2.08
3.53	e	- e	- e	den	- den	- d̄ - c	- d	- d	4.31
2.10	ae	- a	- e	take	- tac	- t̄ - c	- t	- t	7.28
4.08	i	- i	- i	jinx	- jircs	- j̄ - ?	- j	- j	.44
1.89	ee	- e	- e	cheese	ctz	- c̄ - ?	- d	- ch	.53
6.61		- i	- e	gauges	gajiz	- ḡ - ?	- g	- g	.77
1.42	uu	- u	- u	could	cud	- c̄ - ?	- c	- k	2.74
1.96	oo	- o	- o	move	mwv	- m̄ - ?	- v	- v	2.30
1.50	u	- u	- u	fun	fun	- f̄ - /	- f	- f	1.88
1.66	oe	- o	- e	though	ʃo	- t̄ - /	- /	- th	3.48
2.88	o	- o	- o	marathon	ɪʃon	- t̄ - ?	- ʃ	- thh	.38
1.25	au	- a	- u	cause	coz	- c̄ - ?	- z	- z	3.03
33.18				mist	mist	- m̄ - ?	- s	- s	4.67
				measure	meʃir	- m̄ - ?	- ʃ	- zh	.05
DIPHTHONGS				she	- )c	- ) - )	- )	- sh	.83
1.63	ie	- i	- e	high	ha	- h̄ - /	- h	- h	1.85
.64	ou	- o	- u	mouse	maws	- m̄ - /	- m	- m	2.81
.09	oi	- o	- i	noise	nɔyz	- n̄ - /	- n	- n	7.39
*.31	ue	- y	- e	using	ywzɪr	- ȳ - /	- r	- ng	.97
2.36	* Dewey			rip off	ripof	- r̄ - /	- r	- r	7.00
33.18	%age not added in.			little	lital	- l̄ - /	- l	- l	3.81
35.54				why	wa	- w̄ - /	- w	- w	2.11
64.46				feud	fywd	- f̄ - /	- y	- y	1.92
100.00									64.46

The purpose of NS4 and 5 is to provide a close phonetic spelling of English as spoken over the radio and TV, giving the reader the practice needed with more familiar symbolism to appreciate a reform system with both adequate and efficient symbolism.

WES spelling, with single letters and digraphs from the Roman alphabet only; has a simpler, ruleless structure easier for a child or his dad, to learn than most other reform systems. However, it takes just as much space on paper as our erratic choices of letter sequences in TO (traditional or old spelling – OS). The British Nue Speling NS or NS2 with a schwa letter or NS3 with consistent spelling of short e sounds, as suggested by Lindgren in his SR1 plan, has 11 word signs to avoid awkward small wordforms like Ie, hee, wee, etc. A few simple rules can also save space, as in several other popular, Roman only, systems, but a fully adequate 41 letter alphabet can save far more without rules or word signs, if a new keyboard, wider or without capitals is a feasible and acceptable option.

The NS 5 alphabet is such a one to one sound to symbol offering, to avoid special rules and make optimal use of space, with new consonant letters from my Rit spelling system, of largely joined symbols, easy to trace as a handscript and if abbreviated, suitable as a steno system.

Without these steno consonants, NS4 is  
easier for TO than adults to read, and may  
be more acceptable as a first stage, leading  
to NS5 or Kit economy in spelling, as its 8  
or 9 new vowels resemble the 5 related vowels  
in TO. 'a has his own set of script letters - a  
for 2 closely similar sounds, to conform, as  
a is it, with \*American speech, in which the  
brood a and short o are identical.

\*a will add in 6 NS5 consonants more  
slowly, in a book as a matter, and the rest in  
the Kit alphabet, even more slowly, until the  
reading or reading of Kit, but at 10 p.d., as  
(is my)en spaces letters. 'when closed up to  
30 p.d., symbols will join and be Kit, but  
without abbreviation and so, not a steno speed  
system, or real shorthand. ?do you miss /oz  
few capital letters, in this paragraph, \*jo.  
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