Numerous reviews of the experimental research conclude that phonics is indispensable in word recognition instruction. However, there have been numerous objections to phonics teaching over the years. Some of the intolerance of phonics teaching reflects a lack of knowledge about the subject. Critics suggest that phonics hinders children's learning to read. It is also feared by opponents that those promoting phonics instruction are part of a radical, right-wing plot to subvert public education for political reasons. Myths have arisen around phonics: that English spelling is too unpredictable for word recognition teaching to be effective, and that it is better to learn to recognize words by sight and from their context. To be effective, phonics instruction should be direct, systematic, and intensive. Programs should begin early and should generally be carried out with small groups of pupils. Instruction should be explicit, and should aim to teach children to produce the approximate pronunciations of words. To be most productive, a phonics program requires a credible system for syllabating words and a recognition of the difficulty of reading multisyllabic words. Linguistically diverse children need a phonics program that keeps their linguistic backgrounds in mind. (Seventeen references are attached.) (SG)
Introduction

Phonics instruction has been recommended for use in schools for many years. Proposals for teaching phonics to help non-readers learn to recognize written words were made over 450 years ago. Phonics is information about how the speech sounds in oral language (e.g., /b/-/æ/-/t/) are represented by letters of the alphabet (e.g., bat). Phonics teaching aims to develop beginning readers' acquisition of rules or generalizations about the correspondences of letters and speech sounds, e.g., that b stands for the speech sound /b/.

Phonics teaching instructs children how to "decode" written words, that is, how to translate the letters seen in words into speech sounds. The child learning phonics then blends these speech sounds together to try to produce a spoken word. By applying phonics rules in this way readers are able to successfully recognize written words.

The controversy over phonics

Over the years there have been various objections made against phonics teaching. To the present time some reading experts argue that the teaching of phonics is a hinderance to children's learning to read. One of the easy ways to make it difficult for children to recognize words, insists a recent book sponsored by the National Council of Teachers of English, is to "ensure that phonics skills are learned and used" (Goodman, et al., 1988, p. 128).

Such opposition to phonics teaching appears to be based on ideological considerations, however, rather than on scientific grounds. Numerous reviews of the experimental research conclude that phonics teaching is an indispensable aspect of effective word recognition instruction (Chall, 1983; Anderson, et al., 1985; Groff, 1987). The highly reputable Handbook of
Reading Research puts it this way: "Regarding the teaching of reading, the message is clear: if you want to improve word-identification ability, teach phonics" (Johnson & Baumann, 1984, p. 595).

Opponents to the teaching of phonics appear to base their antagonisms to this instruction on highly dubious suppositions (Groff, 1987). They reject any kind of direct, systematic, and formal teaching. Children best learn to recognize words, they say, precisely the way they learned to speak. These reading experts also wish to be viewed as highly progressive in their thinking. Since phonics has been taught for centuries, they disdain it for that reason. The antagonists of phonics usually are highly resistant, as well, to criticism from outside the reading establishment. Endorsements of phonics teaching have often come from nonprofessional groups. Such advocacy of phonics is viewed with suspicion.

It is also found that some of the intolerance of phonics teaching stems from reading experts' lack of basic knowledge about this subject. They appear to have learned little about phonics in their graduate school years. This lack of information about phonics, coupled with the fact that research about phonics has had notoriously little effect on how reading is taught, doubtless add to the intensity of the opposition to this instruction. The present practice of not holding teachers accountable for the quality of their reading instruction likely contributes to the perpetuation of this unfortunate resistance to phonics.

Some of the hostility toward phonics from teachers' organizations, as well as from professors of reading, is the result of the mistaken belief
that many advocates of intensive phonics teaching are participants in a radical, politically right-wing plot to discredit and subvert the public schools in order to satisfy sinister ideological convictions. Not liking conservative groups' orientation to matters in general, opponents of phonics are suspicious their support of phonics is based on untrustworthy motives.

Myths about phonics teaching

The circulation of these erroneous notions about phonics instruction has helped perpetuate several "myths" about word recognition teaching. For example, it is falsely maintained that phonics instruction hinders the development of both comprehension and speed of reading. English spelling is too unpredictable for phonics information to have "utility," it is charged. That is, phonics information cannot be successfully utilized for word recognition except in a relatively small number of instances, its opponents charge.

Instead, it is argued that beginning readers should learn to recognize words by "sight" as "wholes." After such instruction "it won't be long before they are able to handle unfamiliar [written] words and phrases in familiar uses anywhere," teachers are advised (Goodman, 1986, p. 43).

Rather than to learn to apply phonics information, it is emphasized, novice readers should use the sentence context in which a written word appears as the means or cue to its recognition. Word recognition acquisition is not viewed as a perceptual problem by the opponents of phonics. Some reading experts proclaim that "seeing is not primarily a visual process. Neither is reading" (Newman, 1985, p. 101). Therefore, neither the syllabic length of words nor their number of letters supposedly is of any serious concern in beginning reading instruction.

None of these assumptions about word recognition instruction can be verified from the results of standardized reading testings. It is not
surprising, then, that the adversaries of phonics teaching often call for an end to the administration of such measurements. Those who disparage phonics teaching would substitute "quasi-experimental" or "naturalistic" assessment findings for standardized test scores (Weaver, 1989, p. 19).

It does appear that if detractors of phonics are permitted to exchange their subjective observations and judgments of how well phonics knowledge functions in word recognition for standardized test scores, they customarily report that this knowledge performs badly. This unscientific approach to a resolution of the usefulness of phonics appears to be prejudiced and therefore unreasonable manner in which to settle this issue, however.

Modern phonics instruction

Instructions as to how to teach phonics have improved greatly in the recent past, especially since linguists have taken an interest in how children learn to recognize words. Writers of modern phonics programs have eliminated most of the linguistically erroneous descriptions of speech sounds and how they are spelled that were commonly found in phonics materials thirty years ago. More credible explanations have emerged as to how the application of phonics knowledge helps children recognize words. For example, it is now accepted that the most the application of phonics can do is help children produce the approximate pronunciation of words. It has been demonstrated, however, that young children can readily infer and produce the accurate or correct pronunciations of such approximate soundings (Groff, 1983). Moreover, we have experimental verification as to the relative difficulties and effectiveness of various tasks involved in the development of children's conscious awareness of speech sounds (Yopp, 1988). Detailed plans for the order in which phonics information is best taught, based on the latest pertinent empirical evidence, are now available (Groff & Seymour, 1987).
It thus has become increasingly clear that for anyone willing to consult dispassionately the pertinent research on written word recognition development the remaining question about phonics teaching is not whether it should be provided for beginning readers. Instead, as the U.S. Department of Education sponsored publication, *Becoming a Nation of Readers* (Anderson, et al., 1985) puts it, the major legitimate inquiry about phonics still to be settled is what is the most efficient way to teach it.

The relevant empirical evidence suggests that the best method for imparting knowledge about phonics to fledgling readers must take the following factors into account:

1. **Phonics instruction should be direct.** In this respect the research indicates that the effective teaching of word recognition is characterized by a prearranged sequence of learning activities, clear demonstrations by the teacher as to precisely what is to be learned, close supervision of pupils’ behavior to ensure that they stay on task, and much teacher-guided practice by pupils that reinforces and maintains the skills that they have acquired. Research does not support the supposition of opponents of phonics that children best learn to read in essentially the way they learned to listen and speak.

2. **Phonics instruction should be systematic.** Information taught about phonics thus should be arranged into ascending stages of difficulty. Teachers should make sure, through frequent testing, that learners have mastered sufficiently an item of phonics information in this hierarchy before the next most difficult item is taught. This careful arrangement of phonics learning tasks prevents young children learning to read from facing overwhelmingly or frustratingly difficult word recognition challenges. Research appears to support the conclusion that preparing children to decode written
words, by previously teaching them the phonics information that is used in this decoding, helps prevent children's unsuccessful attempts at word recognition (Anderson, et al., 1985).

3. **Phonics instruction should be intensive.** Teachers should provide a substantive amount of practice for pupils for each speech sound-letter correspondence that is taught. Practice with each of these correspondences needs to be continued to the point the pupil overlearns them. In this way phonics generalizations become a part of the learner's long-term memory.

Periods of class time devoted to phonics teaching should be scheduled and maintained on a regular, day-by-day basis. Teaching phonics information fortuitously, casually, or as a subordinate circumstance of some other aspect of classroom instruction can be employed where practicable. This nonintensive form of phonics instruction should not be the basic manner in which it is conducted, however.

4. **Phonics instruction should be commenced as early as possible.** By kindergarten age many children are eager and able to acquire phonics information, and to learn how to apply it to the decoding of written words. These children have the auditory and visual perceptual abilities needed to receive this knowledge. The best way to determine this readiness for the learning of phonics information is to give children the opportunities to gain it. This instruction would be delayed for short periods for children who do not respond to it effectively.

5. **Phonics instruction generally should be carried out with small groups of pupils.** Trying to teach phonics information to individual pupils, one pupil at a time, appears to be too time-consuming to be a workable practice. On the other hand, the range of abilities to learn phonics usually found in
an entire class of children often is too great to make instruction to them, as a whole, effective. Phonics instruction to sub-groups of the class would seem to be the best compromise. This form of class organization likely is superior to whole-class teaching because it allows for more explicitly stated objectives, more systematic diagnosis and supervision of individuals' skill development, and better management of the skills being taught. The studies of these issues "seem to suggest that skills-management systems are effective in terms of students' achievement and self-concept" (Otto, Wolf, & Eldridge, 1984).

6. **Phonics instruction should be explicit, not implicit.** In explicit instruction, the information taught children is referred to directly and in isolation. For example, children are told that hat begins with the speech sound /h/, followed by the speech sounds /a/ and /t/. Pupils are taught to apply these rules to hat by blending these three speech sounds together to produce the approximate pronunciation of the word. In implicit phonics instruction the speech sound-letter correspondences of hat are taught only within the whole word, and not as isolated items. To learn the h = /h/ rule the teacher using implicit phonics instruction would have pupils listen to hit, hat, hot, etc. and then infer that they all begin with /h/.

Explicit phonics teaching is preferable because it does not presuppose what it purports to teach. In the above example of implicit phonics, children would have to understand ahead of time that words are made up of certain discrete speech sounds. Explicit phonics teaching makes no such presupposition. It teaches such information before it is applied by the pupil. There appears to be no evidence that hearing or producing imprecise speech sounds, as is done in explicit phonics teaching, is an obstacle to children's learning to decode written words (Anderson, et al., 1985). As was noted, young children
also can readily infer and produce the correct pronunciations of words after hearing approximate pronunciations of them. Finally, "the trend of the [achievement test] data favors explicit phonics" (p. 42).

7. **Phonics instruction should aim to teach children to produce the approximate pronunciations of written words.** Some opponents of phonics teaching have argued that because the application of phonics knowledge does not result in the correct pronunciation of words it should not be taught. Other critics of phonics instruction have maintained that only a small number of phonics rules have "utility," that is, will produce the correct pronunciations of written words when applied to them.

These are insubstantial complaints against phonics instruction. As linguists have reminded teachers, it is impossible to isolate speech sounds and give them their authentic soundings. When isolated speech sounds are blended together by the child learning to read (e.g., /b/-/a/-/t/, or /b/-/at/, or /bar/-/t/) the resultant pronunciation will never be a true replication of the way bat is spoken. However, pupils learning to read can easily infer the correct pronunciation of bat after hearing the above approximate pronunciations of it.

Then, those who advise the teaching of only a few phonics rules also offer poor advice. They are in error in claiming that a few of these rules when applied will result in the actual pronunciations of words. The application of phonics rules can never have this consequence. But, as was noted, this shortcoming seems to have little if any effect on children learning to decode written words. The argument for teaching just a few phonics rules thus can be shown to be based on a faulty conception of the role of phonics in word recognition.

The proper thing to say about phonics rules is the more rules that are learned and applied, the better. The more phonics rules children can apply the closer they can come to the true pronunciation of a written word when they try to decode it.
8. Phonics instruction, to be the most productive, requires a credible system for syllabicking words. Knowledge of how long words can be broken into their separate syllables is important for the beginning reader to acquire for two major reasons. One, the child can use this information to reduce the exercise of decoding written words to a more manageable task. For example, the challenge of decoding the word, interesting, is reduced significantly if the word can be reduced to int-er-est-ing. Two, the ability to syllabicate words can be easy for children to learn. For one thing, young children ordinarily can detect the number of syllables in a spoken word before they can learn to convey the number of speech sounds in it. Learning to determine the number of syllables in a word obviously is easier for a child to learn to do than is learning to name its speech sounds. The highly simplified form of syllabication, to be described to follow, is easy to teach.

Despite the inherent value to beginning readers of being able to syllabicate long words, over the years teachers have been given inaccurate if not dangerous advice as to how to conduct syllabication instruction. Most of this unacceptable and misleading advice stems from the erroneous notion of teacher educators that learning the syllabication systems dictionaries use to syllabicate words will assist children in recognizing them. Little said in the defense of dictionary syllabication practices for this purpose has any merit. Linguists have noted, in fact, that most of the rules for syllabication taught in schools have no relation to the rules for the pronunciation of words (Groff & Seymour, 1987). This is because dictionary pronunciation rules originated not from authentic descriptions of syllables, but from end-of-the-line conventions established at the time of the invention of the printing press.
This unfortunate state of affairs has led some reading experts to call for a moratorium on the teaching of all forms of breaking down multisyllabic words. But rather than teaching dictionary syllabication, or to the contrary, insisting that no syllabication procedures be taught to the beginning reader, teachers should take a third position. They should teach multisyllabic children to syllabicate written words by showing them how to identify closed syllables (phonograms), ones that begin with a vowel letter and end with a consonant letter (est, un). Children so instructed would try to give speech sounds to the letters in these phonograms, and then blend each syllable so decoded into a multisyllabic word that it is hoped will have the approximate pronunciation of a true word. It is found that if young children can gain the approximate pronunciation of a multisyllabic word they can then infer and produce the correct pronunciation of the word.

In superior phonics programs by the time children are taught this phonogram approach to the syllabication of written words they already would have learned that the "short" vowel sounds (/æ/-/e/-/i/-/o/-/u/) and the "long" often vowel sounds (/ä/-/ē/-/ī/-/ō/-/ū/) can be applied successfully to vowel letters when closed syllables are decoded. Children previously should have learned to recognize the phonograms, in and ish, for example, in words like pin and fish. Now they are ready to be taught to apply this knowledge to recognize words like finish.

The attractiveness of this phonogram approach to syllabication is that little else is needed to be taught children in order for them to decode multisyllabic words. After such instruction children will soon recognize the presence of affixes (re, less) in these words. To this knowledge they will then add an awareness of how the morphemes of words act as effective cues to word recognition. For example, once the child recognizes the morpheme, apply
he or she is greatly aided in the recognition of applies, applied, applying, applicant, application, applicable, applicator, applique, appliance, applicative, and applicatory.

9. Phonics instruction must recognize that multisyllabic words are significantly more difficult to read. The previous discussion on syllabication implies that multisyllabic words are substantially more difficult for young readers to recognize than are monosyllabic ones. Since the 1920s research has shown that the number of syllables in a word demonstrably influences the ease with which beginning readers can recognize it. It is suggested that two times more phonics rules are needed to decode vowel letters in two-syllable words than in one-syllable ones (Groff & Seymour, 1987).

These facts about the relative arduousness of recognizing multisyllabic words unfortunately is generally ignored by the writers of phonics programs currently in use. The lack of distinction given to these two kinds of words is the result of convictions by reading experts that to so do would restrict the range of words offered beginning readers so badly that the rhetoric of the materials given children to read would appear unnatural and therefore unattractive. There seems little doubt that limiting the sentences given novice readers to only words of one syllable would evenuate in artificial appearing prose.

Calling teachers' attention to the dissimilarities of multi- and monosyllabic words should not imply, there, that only sentences with one-syllable words must be provided beginning readers. Becoming alert to the contrasts in these two sets of words, instead, prompts teachers not to expect children to recognize the multisyllabic words in sentences at the outset of reading instruction. At this point, the teacher should be content, rather, to have children decode only monosyllabic words in sentences for a specified stretch of time. During this period teachers would be on hand to provide for children the identities of multisyllabic words given them to read.
10. Phonics instruction can be successfully carried out with children with diverse backgrounds and abilities. This teaching must be designed to take into consideration children's varying intellectual capacities and life experiences, the dialects of English or foreign language that they speak, and their psychological or physical handicaps, if any. Despite the fact that children differ greatly in these respects, the fundamental goal of phonics teaching for all children is to bring them to a conscious awareness of the manner in which the speech sounds of English are represented in writing by the letters of the alphabet. In this regard, the body of phonics, arranged into a hierarchy of items of ascending difficulty, taught these various children, should remain essentially the same for all.

For slower-learning children the pace at which the items in this body of phonetic information is imparted normally will be reduced. More repetitions or examples of each speech sound-letter correspondence usually are called for. More graphic illustrations of these correspondences often are needed. For example, the use of counters of different sizes, shapes, and colors to represent speech sounds has been found to be an effective way to develop slow-learners' conscious awareness of speech sounds. With these children teachers should make sure they can distinguish words that rhyme from those spoken that do not, can say whether two words are the same or different, can listen to isolated sounds (e.g., /b/-/d/-/t/) and name the word they produce when spoken blended, can tell whether two words begin alike, can name the first sound of monosyllabic words, can calculate the number of speech sounds in monosyllabic words, can determine if there is a given speech sound in these short words, and can pronounce the word that would be left if a certain speech sound were removed from a word (e.g., /t/ removed from stand) before these pupils begin learning about speech sound-letter correspondences.
Linguistically diverse children, those who speak other than the standard English dialect of the geographical region in which they reside, also need a phonics program that keeps their linguistic backgrounds in mind. Today's teachers may encounter the nonstandard, socioeconomic, or ethnic dialect known as "black English." This dialect differs from standard English in its vocabulary, in its grammatical system, and in its speech sounds, including their suprasegmentals (stresses, pitches, junctures, and lengths).

Teachers of speakers of black English have the responsibility to understand the relationships between the standard English they speak and black English. They should make sure, in this regard, that their interactions with these children do not stress what teachers view as appropriate linguistic behavior to the detriment of the development of processes with these children for recognizing words. Especially, teachers are obligated to consider not only how black English speakers stand in relation to standard English speakers, but how they got there, i.e., the home-school linguistic mismatch (Groff & Seymour, 1987). They should not assume, moreover, that black English speakers can learn to apply phonics information to decode conventionally spelled words only after they learn how to utter standard English.

When teaching the r = /r/ correspondence, for example, the teacher of black English speakers would be satisfied when these pupils decode for as /fɔ/. Here teachers demonstrate they understand that these pupils have translated the pronunciation of for into their black English dialect.

This decision does not deny the importance of teaching black English speaking children to speak standard English. To the contrary, the penalties
for speaking a nonstandard dialect in our society are grave and weighty: miseducation, negative self-concepts, antipathetic and disapproving attitudes on the part of significant others, and inappropriate psychological assessments and educational placements. It is clear that full access to the high social status and financial rewards gained in the upper levels of social, political, and economic life are not available to the speakers of nonstandard English. The attainment of standard English by the black English speaking child should be the goal of the school for the obvious reasons. Progress in teaching this child phonics information does not have to await this accomplishment, however.

Beyond the problem of black English speakers, teachers in many schools will find increasingly large numbers of foreign language speaking pupils entering the schools of late, particularly those who speak Spanish and southeast Asian languages. Ordinarily, for these foreign language speakers, instruction in English as a second language must precede any instruction in English phonics. Children who are literate in a language like Vietnamese face the additional problem of adapting to a new writing system, as well as an unfamiliar pattern of speech sounds when learning English phonics information.

There remains much controversy over the type of instruction in English as a second language that these children should receive. Proposals for this purpose range from those for immersing the child in English, for teaching such children in their native language along with English for two or three years, to those for maintaining instruction in both the child's native language and in English throughout the child's school career.
Immersing English speaking children in a foreign language program "works very well," it is found (Ovando & Collier, 1985, p. 43). Nonetheless, there are many opponents to immersing foreign language speaking children in English. There seems to be no logical reason, however, why this approach will not also work well if conducted by teachers familiar with the native language of children who are immersed in English. The argument given, for example, that foreign language speaking children who are immersed in English will not receive support for the maintenance of their native language from their families seems a particularly unconvincing complaint against immersion in English programs.

Whatever the kind of English as a second language program that is conducted, it is important to reemphasize that once foreign language speaking pupils are able to identify and produce English speech sounds (or their approximate equivalents) the phonics instruction in English given them should proceed along the same lines as that given native English speakers. In short, there is no need for a special phonics program devised particularly or exclusively for foreign language speaking children. The phonics teacher in this instance recognizes that foreign language speaking children may have difficulty in distinguishing and producing certain English speech sounds. As with black English speaking children, the teacher here accepts approximate or equivalent sounds of standard English uttered by foreign language speaking children, and proceeds to teach them English phonics on this basis. The unique aspect of these children's training in English phonics information thus is in the preparation they are given to develop the prerequisite linguistic readiness they need to successfully learn English phonics, and is not the arrangement of the scope, sequence, and content of the phonics program itself.
Children with psychological and physical problems present yet other challenges for the teacher of phonics. The major, undesirable misbehavior exhibited by children with psychological problems is their seeming inability to pay attention to their teachers. Shortening the time period of phonics periods therefore reduces this problem to a degree. In addition, conducting phonics lessons at a brisk pace, dealing with only a small segment of phonics information in a lesson, frequent regrouping of children on the basis of their achievements, conducting phonics lessons as games, puzzles, or innocuous competitions, constant demonstrations to children of the progress they are making in learning phonics information, using the "total response" technique through which each child answers every question asked by the teacher, providing extra feedback to pupils' responses, and even providing concrete rewards are found to help to stimulate the inattentive pupil.

Teachers have also discovered that speaking in uncomplicated sentences, requiring pupils to repeat teacher directions or explanations or other pupils' responses, branching into material that children have already learned, allowing children to explain matters to their peers or pose questions to them, and making sure all children are listening before a lesson begins can have positive effects on pupils' attentiveness. Of course, teachers should employ with psychologically handicapped children the standard practices of removing distracting influences, appearing enthusiastic and positive about what is being taught, moving children from their seats to the chalkboard so as add variety and to work off muscular discomfiture, and attaching humor to the different concepts being taught. These acts help the inattentive child to listen and attend more intently.

Children who have impaired vision or hearing obviously face unusual
difficulties in learning phonics information. The potential interference on this learning from the presence of such handicaps should not be unduly exaggerated, however. It is found that physically impaired children often can make remarkable adjustments to their physical shortcomings and accommodate surprising well to the task of processing written language. Accordingly, the principle of maintaining these children in the least restrictive educational environment possible, "mainstreaming" them, has come to be widely accepted. It is wrong to always assume, then, that these children's lack of success in learning phonics information is caused by their physical handicaps. This may be an unwarranted yet self-fulfilling prophesy. Simple, expedient actions by the teacher to write more legibly and larger, or to amplify the speech sounds taught in phonics may prove this conjecture to be wrong.

11. Phonics instruction does not cause "hyperlexia" or "word-calling." It has been discovered that some children read individual words better than they can comprehend written sentences or longer discourses. The presence of such children doubtless accounts to some extent for the claim that children taught phonics are likely to become "word-callers," that is, able to decode written words accurately and quickly but unable to understand the meaning of the material they so ably read aloud.

This phenomenon has also been called "hyperlexia." Studies of the matter reveal that with some children striking differences are observable in their reading test scores, differences that favor word recognition ability over reading comprehension. It has been hypothesized that the acquisition by these children of superior word recognition skills has interfered with their capacity to comprehend reading materials, or on the other hand, that they do not have the intelligence to learn phonics but have some innate talent
that allows them to recognize words by as "wholes" by "sight."

Both of these explanations of hyperlexia lack supporting evidence, however (Groff, 1989). There is no data to suggest that hyperlexic children do not have the intelligence needed to learn phonics information. There is no reason to believe, therefore, that they recognize words as wholes without any use of phonics cues. Although there has been no systematic study of how hyperlexics learn to recognize words, there seems nothing in the present evidence on their condition that implies that preventing them from learning phonics will reduce the severity of their handicap. The belief that as these children acquire decoding abilities this particular skill development has a negative effect on their growth of reading comprehension competencies thus is not convincing.

A more reasonable explanation can be given for the appearance of this disability. Hyperlexic children exhibit many of the symptoms of neurological impairment, such as retarded motor development and an extreme delay in oral language development. The specific neurological condition involved in hyperlexia thus likely accounts for the cognitive and linguistic dysfunction that impairs hyperlexic children's ability to comprehend written material. There may be no such dysfunction that interferes with their capacity to decode words. If so, it is the cognitive-linguistic function that controls reading comprehension, but not decoding, that goes awry in these children.

Whether hyperlexia stems from innate physiological impairment, from environmental factors, or a combination of both, the evidence on the malady does not support the allegation that phonics instruction interferes with children's development of reading comprehension skills, or that phonics teaching creates excellent decoders who nonetheless cannot understand what they attempt to read. Gaps between word recognition and reading comprehension scores found in children...
The reasonable assumption, therefore, for otherwise normal children, whose word recognition scores exceed their reading comprehension scores, is to simply provide them some additional instruction in reading comprehension. It will be found that the true hyperlexic child will not respond readily to such teaching in a positive fashion. The amelioration of this child's inability to comprehend written material demands the attention of reading specialists.

12. Phonics instruction successes contradict the "learning styles" theory. Some reading experts support the theory that children learn to read more effectively if their preferred "learning style or modality"—either visual, auditory, or kinesthetic—is matched with a teaching method that is oriented to one of these supposed modalities (Carbo, Dunn & Dunn, 1986). It follows, these reading authorities contend, that the child who somehow has developed a "visual" learning style should not be taught phonics. The purported acquisition of a visual learning style is taken to mean the child cannot use auditory cues or visual-auditory cues when learning to read.

This belief in learning modalities then is used as proof that phonics teaching is not an essential part of reading instruction for children. Even for children, it must be emphasized, who have learned to speak quite normally (but supposedly cannot hear the separate speech sounds of English). Faith in the learning style theory leads opponents of phonics teaching to the general conclusion that "what is important [in learning to read] is not phonics (Carbo, 1988, p. 237).

Several reviews are available of the research made on the hypothesis that if children's supposedly preferred learning modalities are closely linked to teaching methods that reflect the various natures of the sensory modalities
Children will then learn to read more effectively (Groff, 1987). This hypothesis is uniformly rejected by the conclusions of these surveys of the relevant findings. The theory postulates that learning styles are relatively stable, that is, are enduring characteristics of the individual. In this regard it is reasonable to inquire how one accounts for children who are in the process of developing a learning style, or who use a different learning style to take a reading test than one they use in normal reading.

When disinterested critics of the theory have made analyses of tests of learning styles they have found these tests to have low test-retest reliability. In sum, the research on learning styles, other than that done by those who appear ideologically committed to it, does not suggest that children with normal speaking-listening abilities have so-called learning styles that preclude their acquisition of phonics knowledge.

To the contrary, there is much experimental evidence that questions the validity of the major assumption of the reading styles theory, that is, that significant numbers of otherwise normal children have a genetic, innate disposition of probably a neurological nature that prevents them from learning instead, phonics information. This evidence suggests that phonological ability, the conscious awareness of speech sounds, can be taught successfully to young children who exhibit a lack of this ability in a relatively short period of time. The lack of such phonological ability in children thus does not generally indicate that they suffer from some specific neurological disability (Coles, 1987). This lack indicates merely that these children have not been taught this ability, but can be, and should be.
Summary

Phonics instruction is a useful practice for the development of children's word recognition skills. Both traditional experimental evidence and the observations of teachers attest to this fact. The "great debate" among reading experts over how children should be taught to read (Chall, 1983) over nonetheless continues whether phonics information serves this function.

Those who claim it does not can only come to this conclusion by rejecting the traditional empirical research findings on word recognition. This they willingly do, substituting the findings of quasi-experimental or naturalistic research for those of conventional research. In this process they depend on subjective, personal observations, interview data, diaries and note taking, case studies and anecdotes, extremely small samples, and "a lot of intuition" (Guthrie & Hall, 1984, p. 91). The defenders of such research show little or no concern whether it violates the hallmarks of traditional research: objectivity and reliability. It is true, then, that whether one is a defender or an opponent of phonics instruction depends on what model of research one views as valid.

Those who endorse the traditional research model, and its dependence on objective, standardized test data, can find ample grounds for employing phonics instruction. As the above discussion indicates, they now also have available to them much information on what kind of phonics instruction produces the greatest degree of word recognition ability possible. As well, effective refutations for the common undocumented charges against the use of phonics instruction are readily found. There thus is no reason, from this writer's vantage point, for not teaching phonics information to children in a direct, systematic, and intensive fashion, and as soon as they can learn it.
References


