

ONE

The Conventional Wisdom and Its Challengers

OUR AGE IS NOT the first to produce “new” approaches to beginning reading instruction. A review by Charles C. Fries (1962) of courses of study, manuals, and journal articles published between 1570 and 1900 uncovers a succession of “discoveries” and “rediscoveries”—alphabet reforms, word methods, sentence methods, experience methods, phonic methods—each with its claim to be the “new,” “natural,” “true,” “logical” way to begin. By ignoring the dates of publication, we can easily believe we are reading current reports.

From about 1930 on, however, we find a consensus of sorts about beginning reading methods. Although minority views during this period, as in the past, were expressed and followed in practice, most textbooks for teachers and published reading programs for children agreed on the following principles:

1. The process of reading should be defined broadly to include as major goals, *right from the start*, not only word recognition,¹ but also comprehension and interpretation,² appreciation, and application of what is read to the study of personal and social problems.

¹ Identifying the printed word, i.e., “knowing what it says.”

² Understanding what the words say.

2. The child should start with “meaningful reading”³ of whole words, sentences, and stories as closely geared to his own experiences and interests as possible. Silent reading should be stressed from the beginning.

3. After the child recognizes “at sight”⁴ about fifty words (some authors called for more, some less), he should begin to study, through analyzing words “learned as wholes,” the relationship between the sounds in spoken words (phonemes)⁵ and the letters representing them (graphemes),⁶ i.e., *phonics*.⁷ However, *even before* instruction in phonics is begun, *and after*, the child should be encouraged to identify new words by picture and meaning clues.⁸ Structural analysis⁹ should begin about the same time as phonics and should be continued longer. (*Word perception*¹⁰ is the term commonly used to describe the different ways of identifying new words,

³ Implying both word recognition and comprehension.

⁴ Identifying printed words immediately, without analysis of parts, e.g., without spelling or “sounding out.”

⁵ “A *phoneme* is a minimum structural unit in the sound system of a language. A phoneme as such does not have any meaning but since differences between phonemes distinguish one morpheme [or meaningful linguistic unit] from another, a difference between phonemes often signals a difference in meaning. For example, the difference between /b/ and /f/ distinguishes ‘bat’ from ‘fat.’” (Sledd, 1959, p. 237)

⁶ “Just as phonemes are the minimal sound units in a language, *graphemes* are the minimal visual symbolic units in a writing system. . . . graphemes (alphabetic letters, digits, punctuation marks, and the like) may appear in variant forms (upper and lower case, different type faces, different hand-written shapes, and so on).” (Carroll, 1964, p. 340)

⁷ “*Phonics* is the study of the speech equivalents of printed symbols and their use in pronouncing printed and written words. . . .” (Albert J. Harris, 1962, p. 61.) Fries (1962) points out that in much of the writing on methods of teaching beginning reading the words *phonetic* and *phonetics* are used erroneously (i.e., “overlap in their use and meanings”) for the words *phonic* and *phonics*. However, “. . . for all those who deal with *linguistics* as *the scientific study of language*, *phonetics* is concerned with such matters as the nature of the sounds of language, their differences, the articulatory movements by which the differences are produced, the vibrations that account for their acoustic effect. *Phonetics as a science is not concerned with the ways these sounds are conventionally spelled*, nor with the process of reading.” (p. 139) In this book I have therefore tried not to use *phonetic* or *phonetics* when it is clear that *phonic* or *phonics* is meant. However, in quoting others, this usage could not be avoided. Indeed, most of the teachers’ manuals in the most widely used basal reading series call their instructional program in phonics “phonetic analysis.” See also William S. Gray’s *On Their Own in Reading*, where *phonetic analysis* is used to refer to *phonics*.

⁸ *Picture clues* are hints for identifying printed words suggested by the pictures on the page; they allow the child to make an intelligent guess about the word from the illustration. Meaning (or context) clues are clues for identifying printed words suggested by the surrounding words; the child makes an intelligent guess about the word from what other words indicate would “make sense.”

⁹ “Structural analysis means dividing a word visually into meaning parts which can be recognized or attacked as subunits. This includes dividing words into prefixes, roots, and suffixes, and separating compound words into their components (school-room).” (Albert J. Harris, 1962, p. 88)

¹⁰ See Gray (1948 and 1960) for a fuller delineation of word perception.

phonics being *only one* of these ways. In fact, in many published programs the child is encouraged to use phonics only when the other ways fail.)

4. Instruction in phonics and other means of identifying words should be spread over the six years of elementary school. Usually, instruction in phonics is started slowly in grade 1, gathering momentum in grades 2 and 3.

5. Drill or practice in phonics "in isolation" (i.e., apart from the reading of sentences or stories) should be avoided; instead, phonics should be "integrated" with the "meaningful" connected reading. In addition, the child should not isolate sounds and blend them to form words. Instead, he should identify unknown words through a process of visual analysis and substitution.¹¹

6. The words in the pupils' readers for grades 1, 2, and 3 should be repeated often. They should be carefully controlled on a meaning-frequency principle; i.e., they should be the words that appear most frequently in general reading matter and that are within the child's listening and speaking vocabulary.

7. The child should have a slow and easy start in the first grade. All children should go through a readiness or preparatory period, and those judged not ready for formal reading instruction should have a longer one.

8. Children should be instructed in small groups (usually three in a class) selected on the basis of their achievement in reading.

These eight principles, based partly on the interpretation of research findings, partly on theory, partly on the combined experience of classroom teachers, and partly on faith and belief, came to constitute the conventional wisdom of beginning reading instruction. From about 1930 to the early 1960s, these principles were incorporated in the most widely used basal-reading series and teachers' guides;¹² they have been taught by college teachers to future teachers of reading; and they have been followed by most classroom teachers (Austin and Morrison, 1961 and 1963; Barton and Wilder, 1964).

Since the middle 1950s, however, one after another of these principles has been vehemently challenged, largely as a result of the popular success of Flesch's *Why Johnny Can't Read*. Out of these challenges have come new reading programs, some resembling rather closely the older programs long ago discarded in favor of the "modern" programs of the 1930s. As in the past, most current innovators claim that theirs is the "new," "natural," "true," "logical," or "most scientific" way to begin.

¹¹ See Gray (1948 and 1960).

¹² See Chap. 8, in which I analyze two of these reading series.

I shall briefly describe some of the new programs in what I believe is the chronological order of their impact as challengers to the established order. A more detailed analysis is presented in Appendix A.

PHONIC INNOVATIONS: PARTIAL READING PROGRAMS

Even before *Why Johnny Can't Read* appeared, some school systems were using concentrated supplemental phonics programs—*Reading with Phonics* (Julie Hay and Charles E. Wingo), *Phonetic Keys to Reading* (Theodore L. Harris et al.), *Phonovisual Method* (Lucille D. Schoolfield and Josephine B. Timberlake). Since 1955, however, many more phonics programs have been published, only a few of which are mentioned here: Sister Mary Caroline's *Breaking the Sound Barrier*, Romalda B. Spalding and Walter T. Spalding's *The Writing Road to Reading*, and Caleb Gattegno's *Words in Color*.

Any general statement about phonics programs will be true about some and false about others. As a group, however, most of these supplemental programs share certain characteristics that differentiate them from the phonics component of conventional basal reading programs: They teach phonics more directly, they teach it earlier, and they cover more ground.

Some are frankly "synthetic" in that they teach the child the letters representing certain sounds that are then blended to form words. Some combine phonics with writing and spelling, while others teach phonics through little stories to be "read for meaning" that resemble the stories in conventional basal readers. Some insist that the child acquire a considerable amount of phonics knowledge before he begins reading words, sentences, and stories. Others suggest combining phonics instruction with the reading of stories from conventional basal readers and library books. Still others follow the conventional pattern of teaching phonics only after the child has mastered a sight vocabulary (words learned and recognized as wholes). Additional variations, perhaps minor, are that some start with the short vowels, others with the long vowels, and still others with consonants. Probably more important is the number of phonic elements and rules to be learned: some give the child a heavier "phonic load" than others.

Most significantly, however, none of these separate phonics systems claims to teach the child all that he needs in beginning reading. All are designed for use with existing published materials—particularly the conventional basal readers—which are to supply the needed practice in sight and meaningful reading.

The authors and proponents of these separate phonics programs

*D*O children learn to read better with a beginning method that stresses reading for meaning or with one that concentrates on teaching them how to break the code? The research on this question is copious and varied.

Most of this research is experimental, and most of the experiments have taken place in classrooms, where it is extremely difficult to control all relevant conditions, rather than in the laboratory.

Laboratory experiments usually involve only one aspect of method, all other conditions being carefully controlled. For example, is it better to learn words or letter-sound correspondences first—“better” or “worse” being measured by the ease of learning new words? Such a question was asked by Bishop (1962), who answered it by analyzing the test results of word-taught, letter-taught, and nontaught (control) groups of subjects.¹ Laboratory experiments are particularly valuable in that they permit the study of basic questions and in that more conditions can be controlled than in classroom experiments: Teachers invariably make adjustments in methods to suit their own style of teaching. Thus it is unfortunate that until quite recently there have been very few laboratory experiments dealing with the beginning reading process. More such experiments are being carried on today and will be in the future, particularly because of encouragement and support from the USOE's Project Literacy program.

¹ See Chap. 4, pp. 115, 116, for a discussion of this experiment.

Classroom experiments—the typical kind of research carried on by students of beginning reading methods—usually take the form of comparison between Method A and Method B. Under this research design, several first-grade classes are taught by Method A (let us call them the experimental group) and several other first-grade classes are taught by Method B (let us call them the control group). After two years, all the children are given the same tests. If the group using Method A scores significantly² higher on the tests (e.g., of oral reading and spelling, selected because they are considered good measures of what both methods are trying to accomplish), then it may be concluded that Method A is better than Method B—but only for oral reading and spelling, for the kinds of children tested, and for the end of grade 2.

Will Method A continue to be better for the same children after five years? Will it be better after two years with children who are duller or brighter than those originally studied? A longer follow-up period (retesting at the end of fifth grade) is needed to answer the first question, and other classroom experiments with brighter and duller children are needed to answer the second. Furthermore, a classroom experiment cannot tell the investigator anything about outcomes he has not tested. Thus, he can say nothing about the greater “love of and lifetime use of reading” by the children taught under Method A as compared with Method B unless he retests or interviews the same children as adults—which, incidentally, no one has done.

Even the limited conclusions permitted by each classroom experiment are valid only if we can reasonably assume that the experimental and control groups do not—before and during the experiment—differ in ways that may influence how they learn

² This is usually thought of in terms of statistical significance. That is, the difference should be one that would not, as determined by standard statistical formulas, be found by chance alone.

to read or spell. Thus, it is essential for the researcher to determine and report that his experimental and control groups are about equal in terms of intelligence, socioeconomic status of parents, and other personal-cultural factors that may influence reading achievement. Also, the teaching should be of the same quality, the instructional time in reading should be equal, and so forth. In other words, it is incumbent upon the investigator to "equate" the two groups in anything that may in itself influence results for good or bad. If this cannot be done when the experimental and control groups are first formed, it should be done through the use of proper statistical procedures when the results are analyzed.

Classroom experimentation is further complicated by the need to define clearly each of the methods compared—how they differ and how they are similar. As we shall see later, lack of such definition has been one of the greatest stumbling blocks in the design of these experiments.

Another kind of research that is relevant to the problems of beginning reading methods is associational, or correlational, rather than experimental. In correlational research the essential questions asked are: What goes with what? And under what conditions? For beginning reading, such questions have been asked as: What is the relationship between a child's knowing the alphabet (naming the letters) in kindergarten and his reading achievement at the end of first grade? Do those children who knew more letters in kindergarten (all other conditions being equal) know how to read better at the end of grade 1? Or, what is the relationship between knowing the sound values of letters (scoring high on a phonics test) and reading comprehension (score on a standardized silent reading test) in the third grade? Do third graders who read better know more phonics?

If the researcher finds, for example, that phonic ability is highly correlated with reading ability—that

is, if high scores on the phonics test accompany high scores on the reading test—he still does not know which is the cause and which the effect, or whether both are effects of a more fundamental cause. To determine which causes which, he must consider the findings of experimental research and, ultimately, formulate a theoretical position.

Still other research relevant to beginning reading has been carried on in the clinic in the form of case studies. The aim of clinical research is to determine why certain individuals perform as they do. Why, for example, do some children fail to learn to read? Or learn slowly and with great difficulty? How can they be helped to do better?

While clinical research can be extremely informative, one of its major pitfalls is that the findings may be limited to the particular cases studied.

The different kinds of research have generally been carried out by investigators from different disciplines. The laboratory experiments have, on the whole, been the province of the experimental psychologist. The classroom experiments and correlational studies have been conducted by educational psychologists and others interested in educational research (graduate students of education, administrators, classroom teachers). The clinical studies have been carried out by neurologists and psychiatrists as well as by psychologists.

Each group has tended to publish its findings in journals read by those of similar background and interest. Indeed, reading research may be said to have three cultures—the laboratory, the classroom, and the clinic. Seldom have the three groups' findings on similar questions been integrated.

Section 2 reports the research findings from these three cultures. Chapter 4 presents a synthesis and interpretation of the experimental research from the classroom and laboratory. Chapter 5 presents a synthesis of the findings from the correlational

studies. And Chapter 6 takes up the evidence from several well-known clinical studies of children who have failed to learn to read. Chapter 3, the opening chapter, sets the scene with a discussion of the nature and state of the research in beginning reading.

Before we examine the intricacies of the research, I shall present here a brief summary of my findings. But I urge the reader to read all the chapters in this research section, for it is important to know not only what the researcher has found, but also how he found it—what he used as evidence and how he reasoned to arrive at his conclusions.

My analysis of the existing experimental comparisons of a meaning emphasis versus a code emphasis tends to support Bloomfield's definition that the first step in learning to read in one's native language is essentially learning a printed code for the speech we possess. It does not support the prevailing view that sees the beginning reader as a miniature adult who should, from the start, engage in mature reading. Early stress on code learning, these studies indicate, not only produces better word recognition and spelling, but also makes it easier for the child eventually to read with understanding—at least up to the beginning of the fourth grade, after which point there is practically no evidence.

Although the experimental studies confirmed the definition of beginning reading proposed by most linguists, our analysis neither proved nor disproved that their methods (or those of the alphabet reformers) were better than other code-emphasis methods, e.g., systematic phonics.

The experimental research provides no evidence that either a code or a meaning emphasis fosters greater love of reading or is more interesting to children. Nor does it tell us whether one commercially published code or meaning program is better than another. It does, however, show us that the two emphases produce different learning patterns.

There is some experimental evidence that children of below-average and average intelligence and children of lower socioeconomic background do better with an early code emphasis. Brighter children and those from middle and high socioeconomic backgrounds also gain from such an approach, but probably not as much. Intelligence, help at home, and greater facility with language probably allow these children to discover much of the code on their own, even if they follow a meaning program in school.

The correlational studies support the experimental finding that an initial code emphasis produces better readers and spellers. They show a significant relationship between ability to recognize letters and give the sounds they represent and reading achievement. Although knowledge of letters and their sound values does not assure success in reading, it does appear to be a necessary condition for success. In fact, it seems to be more essential for success in the early stages of reading than high intelligence and good oral language ability.

The clinical studies of pupils with reading problems indicate that both code and meaning approaches produce reading failures.

There is some evidence that an initial reading method emphasizing "word," "natural," or "speeded" reading produces more serious failures than one emphasizing the code. The remedial treatments described in these studies all concentrated on teaching the pupil to decode printed words, and they all reported success in helping the disabled reader eventually to read normally—i.e., with speed, comprehension, and appreciation.

In short, the clinical reports analyzed give us reason to believe that a stronger code emphasis would help prevent reading failure, although never eliminate it entirely: There is sufficient evidence to show that such failure stems also from the personal characteristics of the learner.

Very little of the research evidence tells us about differences in results with the two kinds of approaches at the end of fourth grade and beyond. We might hypothesize, however, that whether the code emphasis keeps its advantage in the intermediate or upper elementary grades and beyond depends on how reading is taught in these grades. If the reading programs do not put enough stress on language and vocabulary growth and provide sufficiently challenging reading materials, the early advantages may be dissipated.