This bulletin is a digest and interpretation of some of the main findings reported in Chapter 7, "Nature and Extent of Current Practices in Educating Those Who Teach Reading," by J. Richard Harsh in "The Information Base for Reading: A Critical Review of the Information Base for Current Assumptions Regarding the Status of Instruction and Achievement in Reading in the United States," the final report of a study for the U. S. Office of Education, see ED 054 922. Documents published between 1960 and 1970 were surveyed, and answers to questions concerning the preparation and selection of reading teachers, the state education code directives for the teaching of reading, the state certification requirements for reading teachers and specialists, school districts' requirements for preparation of reading teachers, and the relationship between teacher preparation, teacher characteristics and student reading achievement were sought. The answers to these questions are summarized. (For related documents, see TM 042 357-358.) (DB)
III. EDUCATING THOSE WHO TEACH READING

Paul B. Diederich

This bulletin is a digest and interpretation of some of the main findings reported in Chapter V, "Nature and Extent of Current Practices in Educating Those Who Teach Reading," by J. Richard Harsh in The Information Base for Reading: A Critical Review of the Information Base for Current Assumptions Regarding the Status of Instruction and Achievement in Reading in the United States, the final report of a study directed by Reginald Corder (ETS, Berkeley Office) for the U.S. Office of Education, Project 0-9031, 1971. The full report is available in hard copy or microfiche through ERIC ED 054 927.

The survey was a survey or search from 1960 to 1970 bearing on three problems: the nature and extent of the current deficit in function, literacy, the effectiveness of different methods of teaching reading, and the training of teachers of reading. Using all possible bibliographic sources, the project staff listed over 15,000 documents bearing on these three problems. These were rated independently by five experts, and 1,855 were selected for critical review, including 173 on the third problem (the subject of this digest), 56 on the second and third, and 7 on the first and third. Thus the chapter here summarized was based on a critical look at 236 documents bearing on the training of teachers of reading. The list of all 1,855 documents that were reviewed occupies 134 pages of the full report.

The reviews were done by 22 doctoral candidates at the University of California in Berkeley. Applicants for this job all reviewed the same article, using a standard review form of eight pages developed by a technical committee. The most proficient participated in several training sessions and were monitored thereafter by the staff member who synthesized the reviews in each area.

The reliability of those aspects of the reviews that could be quantified was determined by having 200 articles reviewed independently by two readers. The coefficients were all above .70 except one of .62 for a rating on "treatment," which was the most sketchily reported. This use of doctoral candidates as reviewers forestalled the objection that established researchers are hypercritical of the research of others. These young students were bent only on extracting whatever solid information they could find in the published reports.

Questions to Be Answered

How are teachers of reading prepared and selected for that task? What are the state education code directives for the teaching of reading? What are the state certification requirements for reading teachers and specialists? What preparation of reading teachers or specialists is required by school districts? What is the relationship between teacher preparation, teacher characteristics, and student achievement in reading?

These questions, posed by the U.S. Office of Education, provided the framework of the chapter here summarized, which was limited to documents published between 1960 and 1970. The most comprehensive previous surveys were those by Austin and Morrison (1961 and 1963) and by Conant (1963). These studies showed how those who were teaching reading in the 1960's had been trained in the 1950's. The present survey was concerned with training provided in the 1960's for those who will teach reading in the 1970's and beyond.

STATE EDUCATION CODES

The review of state education codes revealed that all states have given broad powers to state boards or departments of education. The section of the state code dealing with the course of study commonly reads, "The state board of education shall determine the course of study for all common schools."

This publication was prepared pursuant to a contract with the National Institute of Education, U.S. Department of Health, Education and Welfare. Contractors undertaking such projects under government sponsorship are encouraged to express freely their judgment in professional and technical matters. Points of view or opinions do not, therefore, represent official National Institute of Education position or policy.
Twelve states specify no course requirements but leave the determination of the course of study entirely to the state board of education. Sixteen states have statutes requiring specified subjects, but they do not include reading as such subjects as citizenship, safety, morals, thrift, kindness to animals, and evils of narcotics and alcohol. Thus 28 states do not have statutes requiring the teaching of reading, the teaching of such a basic subject is simply assumed. Of the 22 states and the District of Columbia* which have such statutes, five passed such legislation in the past ten years, five others in the preceding ten, the remaining 13 have enactments dating as far back as 1924.

No state code specified the textbooks or other materials required for reading instruction. Sixteen, however, either require statewide adoption of textbooks or exercise some other ultimate control over their selection. Eighteen depend on local adoption with no state supervision, and 13 require a list of acceptable books from which each district makes its selection. Four make no reference to required use of instructional materials.

The prescription of specific materials, time, or methods of instruction for reading or any other subject has been avoided in state education codes. The authority to make such prescriptions is assigned to the state board of education or to local school districts.

STATE CERTIFICATION REQUIREMENTS

All states have statutes that require licensing or certification of teachers. Almost all states, however, grant probationary credentials to those who have not met the regular requirements if no fully credentialled teachers are available. Although only one state has a statute specifying the certification of reading teachers, 22 have made provisions for the state board of education to issue "special" certificates for certain subjects or fields as deemed necessary. Less than half of these states and of those that specify reading as a subject of instruction actually certify reading teachers.

Every state has developed its own guidelines for certification; there is no uniform system. Professional education requirements range from a minimum of 8 semester hours to a maximum of 53 semester hours. All states require a minimum of a bachelor's degree for initial certification of secondary school teachers; all but four require it for elementary teachers. While the predominant practice is to "endorse" the fields of preparation on secondary teaching certificates, such endorsement is not found on elementary certificates. Certification requirements are commonly stated in terms of academic preparation with extensive use of "approved programs" of training institutions as the means by which teachers may be certified.

The literature contains conflicting and ambiguous information on reading and reading-related courses required for certification. The extensive use of the "approved program" approach makes it impossible to form definite conclusions regarding the presence or absence of reading requirements. In the review of courses required in approved programs, a wide variety of requirements of courses in reading, reading methods, and language arts was found. Although the evidence is not consistent, it seems reasonable to hypothesize that it is possible to be certified as an elementary or secondary teacher in some parts of the United States without having taken any courses in reading or language arts.

Reading Specialists

States designate reading specialists by titles that suggest a variety of functions and qualifications: reading specialist, reading endorsement, reading teacher, remedial reading teacher, reading consultant, etc. Although 32 states designate some specialists in reading, variably titled, it appears that only 27 certify specialists who provide direct services in teaching reading to children. None of these have requirements that meet all the minimum standards suggested by the International Reading Association. In the 19 states that do not certify reading specialists, the colleges and universities offer courses in reading that appear to be designed for teachers seeking such certification. No common criteria for this type of certification are used by all states.

Requirements of Teacher Education Institutions

Since there was no national summary of the current offerings and requirements of institutions providing teacher education programs, catalogs were obtained from 374 (93%) of such institutions in the United States. These revealed that 64% require a separate reading methods course of two or three semester hours in the under-
Graduate preparation of elementary teachers. Another third require an integrated reading-language arts course or a general methods course which includes reading for elementary teachers. Only 3% list no reading course requirement for elementary teachers. Twelve percent require some form of practical experience or practice teaching concurrent with the required reading courses. In addition, 47% require a course in children’s literature. All institutions preparing elementary teachers require 6 to 16 semester hours of practice teaching, usually in the senior year.

The catalog requirements of reading courses for secondary teachers were significantly less than those for elementary teachers. Although only 6% required a reading methods course, nearly 60% offered one or more courses in reading methods at the secondary level. Three percent required such a course for those preparing to teach in junior high schools.

During the past decade, there appear to have been a slight change in these requirements. Both this study and the 1960 survey by Austin and Morrison reported that the most frequent requirement for certification as a regular elementary teacher was one course in reading and/or language arts. The institutional requirements for preparation in reading have increased slightly for elementary teachers while there has been a slight decline in such requirements for secondary teachers. At the same time, these institutions have increased their offerings of courses for the preparation of secondary reading teachers and of graduate program for reading specialists. During the past decade there has been an increasing amount of experimentation which has emphasized the need for a more diagnostic, prescriptive, and individualized approach to the teaching of reading. Despite this movement, the requirements for teacher certification in reading have shown no substantial change.

SCHOOL DISTRICT REQUIREMENTS

The survey of literature for this project did not reveal a current source summarizing school district requirements for the preparation of reading teachers and specialists. To obtain a sample of such information, a request was sent to the 20 largest school districts in the United States. This sample included about a third of the U.S. population and represented most, if not all, of the diverse reading needs faced by all school districts.

All of the 17 responding cities employed some type of special reading teacher, but there was wide variation in preparation requirements which commonly did not relate to state certification requirements. At least half did not require the state special reading certificate for reading teachers and specialists.

In the states where special reading programs have been created by the legislature, special certification for teachers in these programs was required by these school districts. In the same districts, however, when the local board designated special reading teachers or specialists, preparation requirements were not necessarily related to state certification requirements. Forty percent required one to five years of successful teaching experience. The large cities rely mainly on their supervisory and administrative personnel to identify teachers in service who have demonstrated special competence in teaching reading. Only four of these cities offered a salary differential for special reading teachers.

The surveys reviewed in the literature show that supervisors perceive a need for more assistance in providing for students with reading disabilities. They report that between 50% and 60% of such students receive no treatment other than that provided by the regular teacher who has had only two or three semester hours of preparation for the teaching of reading. The nature and extent of such preparation are far less than the professional reading association recommends and less than the surveyed teachers feel they need.

The limited surveys of special ethnic populations indicate that the special problems in reading and language development of such groups receive little attention. The literature did not provide information on the training and characteristics of the relatively few teachers who specialize in teaching reading to particular ethnic groups.

EFFECTS OF TEACHER EDUCATION ON READING ACHIEVEMENT

An attempt to summarize research on the effects of the “teacher variable” on reading achievement is confounded by the lack of agreement on definitions. The “teacher variable” or “teacher effect” treated in the literature may refer to teacher preparation, performance, attitudes, or characteristics. For each of these dimensions there are many definitions. Teacher education, for example, may be treated as the academic degree received, the number of reading courses taken, or the nature and extent of practice teaching. Many research reports do not acknowl-
edge these complexities, the variables and their interactions are unspecified.

In spite of these difficulties, it was possible to relate many studies of teacher effects to three hypotheses:

1. Reading achievement depends on the amount of teacher preparation.
2. Reading achievement depends on the quality of teacher preparation.
3. Reading achievement depends on certain teacher characteristics.

The literature reviewed did not prove or disprove any of these hypotheses, but it suggested priorities. Teacher characteristics appeared to have a greater effect on reading achievement than the amount, type, or quality of teacher preparation. Of these characteristics, verbal ability and flexibility (or sensitivity) appeared to make more difference than any other qualities the investigators were able to measure. This seems logical, even obvious. An effective teacher must be intelligent and able to communicate, and since it is hardest to teach reading to groups that are usually of a different class, race, or background from the teacher's, the ability to achieve rapport and understanding with such groups is important. The studies provided no evidence that significant differences in reading ability resulted from various levels of preparation, but they did suggest that factors unrelated to teacher education such as individual attention, warmth, empathy, understanding, and patience may be relevant to the teacher's effectiveness.

Studies indicated that the preparation of teachers of reading was seen as more adequate by elementary than by secondary teachers, although they perceived certain significant deficiencies. Elementary teachers felt a lack of knowledge of diagnostic and corrective techniques, group procedures for reading instruction, tests and evaluative techniques, and criteria for selecting students for remedial instruction. High school teachers felt that their preparation for teaching reading had been much less adequate, and they noted many critical deficiencies.

The allocation of teachers to positions related or unrelated to their undergraduate major field was examined in a major study (Levin, 1968). Particularly in large city schools, teachers are often not assigned to the subject or levels for which they have been prepared. The quality of teacher education should not be expected to affect their performance or students' achievement if those assigned to a given position have not been prepared to teach either that level or that subject.

A further consideration in determining the relation between teacher education and performance is the teachers' perception of whether their preparation was or was not an important influence. Although the evidence is not conclusive, it suggests that reading teachers found the manuals of the basal reading series, practice teaching, and independent reading of books and articles on the teaching of reading more influential on their performance than coursework.

Several studies reported that specific kinds of preservice or inservice training did affect the behavior or the teachers involved, but it was difficult to generalize from these studies. All used small samples that might or might not have been representative. With one exception, there was no followup to determine whether the effects were sustained over time. The fact that all these programs necessitated special attention to the participants suggests that the Hawthorne effect may explain many or all of the observed changes.

More important is the fact that none of these studies presented evidence that the reported changes in teacher behavior had significant effects on student achievement in reading. It is hardly surprising that human behavior is subject to change and relearning, but clearly this is not all that needs to be known. If the primary concern is with increasing the level of reading achievement, the first task for research should be the identification of teacher behavior that improves reading. Once the dimensions of this behavior are defined and understood, it should be possible to translate the processes for learning them into teacher education.

Because teacher training is a relatively easy variable to manipulate, researchers have apparently assumed that by assessing the effects of a variety of training techniques on teacher behavior, the essential aspects of training will emerge. This has not been the result. Rather, a range of relationships has been shown to exist, but none of the behaviors investigated has been shown to be more desirable, appropriate, or necessary than any other.

Because none of the studies have tried to investigate in what circumstances, with what teachers, and with what students any given teaching behavior may be most effectively applied, the relationships between teacher performance and student achievement in reading must be regarded as unknown.
TEACHER CHARACTERISTICS

Of all teachers in public schools in the United States, 69% are women, of whom 47% are in elementary and 22% in secondary schools (National Education Association, 1967). Of the 31% who are men, 5% teach in elementary and 26% in secondary grades. A national survey of public school reading teachers in grades 1–6 indicated an even higher percentage of female teachers. Several studies of the sex distribution of the teacher population indicate that, while elementary reading teachers are overwhelmingly female and secondary reading teachers (and probably reading specialists) are largely female, less than half of college reading teachers are female.

Age and experience distributions of the teacher population show that 34% are under 30, 23% between 30 and 39, 17% between 40 and 49, and 26% over 50 years of age. Teaching experience averages 11.5 years: men, 9.0 years; women, 13.4 years; higher in the southeast than in any other region. Of reading teachers, 14% in grade 1, 18% in grades 2–3, and 8% in grades 4–6 have had one or two years of experience, while 22% in grade 1, 17% in grades 2–3, and 18% in grades 4–6 have had more than 25. Secondary reading teachers are generally younger than elementary.

Of the reading teachers in large cities, the most recent data indicated that 72% in the east were white, 76% in the midwest, 79% in the west, but only 36% in the south. Of the students taught by black teachers, 22% in the east were white, 21% in the midwest, 23% in the west, but only 8% in the south. In other words, there were more black teachers teaching black students in the south than elsewhere in the country.

The relationship of such demographic information to reading achievement has not been documented. There is a good deal of speculation but no evidence. For example, some ask whether there should be more male teachers of remedial reading, since there are more boys than girls in remedial reading classes, but such hypotheses have not been tested. Researchers often provide demographic information for their samples but apparently more for descriptive than for analytic purposes. Such information has rarely, if ever, been treated as an independent variable.

A number of studies have investigated the effects of other teacher characteristics on student achievement. In one study, Levin (1968) examined the verbal aptitude scores of teachers and drew the following conclusions: 1) the average verbal score of teachers in the south was considerably below those of the east, midwest, or west. 2) Higher verbal scores were significantly associated with higher amounts of education. 3) Humanities majors had the highest verbal scores, followed by social studies, science, and mathematics majors, while the lowest verbal scores were associated with miscellaneous and elementary education majors; 4) female teachers and those from urban backgrounds had higher than average verbal scores while nonwhite teachers had lower; 5) there was a significant correlation between verbal scores and attitudes (as measured by a questionnaire) toward special educational provisions for disadvantaged children. The last finding, of course, may indicate greater sympathy for the needs of the ghetto child but cannot be interpreted as showing greater competence in dealing with ghetto children.

In a second study, Levin (1970) applied cost-effectiveness analysis to decisions on teacher recruitment and retention, comparing the dollar cost of reading achievement brought about by teachers with higher verbal scores with that brought about by teachers with additional years of experience. For both Negro and white students, each additional point of verbal score was associated with higher gains than each additional year of experience.

Although studies dealing with the relationship of teacher characteristics to reading achievement present data on limited samples and do not investigate identical characteristics or outcomes, the two characteristics of verbal ability and flexibility or sensitivity in dealing with a variety of students seem to emerge as the only ones thus far studied that have repeatedly been associated with higher gains. In other words, bright, friendly people tend to teach reading better than the dull and disagreeable. This is hardly surprising; the only surprise is that researchers have been able to measure these characteristics, however crudely. Unfortunately, this finding is of little help in designing programs of teacher education because, at the age when people become involved in such programs, these characteristics are extremely resistant to change. Something can be done by selection, but the teaching profession can hardly hope to attract as many bright, friendly people as are needed to operate the schools. Moreover, the kinds of tests of verbal ability that show up well in the studies put Negro aspirants to teaching at a severe disadvantage, probably owing to environmental conditions that are not easily changed. Rigorous use of such tests for selection at either the training or hiring level would not be politically feasible or morally justifiable at this time. The measures of flexibility, sensitivity, or empathy could hardly be used in selection because in that setting they are easily faked, and when they are sufficiently disguised to prevent faking, their validity is questionable.

If teacher training programs cannot produce intelligent, kindly people and cannot do as much as they would like to select them, what is left? Most obviously, they can teach such candidates as they are able to attract to do the kinds of things with students that cause them to learn.
and in this case, to learn reading. The literature reviewed in this survey was not too informative on this score. A number of studies showed that specific kinds of training influenced teacher performance, but they did not show what kinds of performance had the greatest or most consistent effects on reading achievement. The basic difficulty is that the questions to be answered are more complex than research has been able to encompass up to this time. They go on and on—almost like The House That Jack Built: what kinds of training of what kinds of people produce what kinds of teacher behavior that cause what kinds of students in what circumstances and conditions to develop what kinds of reading competence? Researchers have tried to answer such questions one at a time, but since they are all interrelated and the studies are not, the answers have not provided much direction for teacher education. The hope of the future is that larger studies of longer duration can now be mounted in which whole clusters of variables can be studied in all their interactions with one another.
Bibliography


