The contributions of the "First Grade Reading Studies" funded by the United States Office of Education are discussed. The studies contributed in the areas of subjective benefits, generalizations about school and classroom procedures, and the objective collection of data. Of the subjective benefits, the establishment of a precedent was most important. The establishment of a coordinating center was another first. The effect of using various methods and materials for the motivation of teachers was beneficial. Involvement in the cooperative research also enhanced teacher understanding of appraisal techniques. The findings were divided between those which affirmed concepts held and those which supported concepts not generally endorsed in the profession. The first-grade studies shifted the emphasis of research from artificial controversies to more meaningful factors. This paper was presented at a joint meeting of the International Reading Association and the National Conference on Research in English (Boston, April 25, 1968). (BK)
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"An Evaluative Look at the Cooperative Studies of Reading in First and Second Grade"

[INTERNATIONAL READING ASSOCIATION,
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Thursday, April 25, 1968, 3:00 P. M.
Bay State Room, Statler-Hilton
During the 1964-65 school year the United States Office of Education sponsored twenty-seven related investigations of beginning reading instruction, which have become known as "the First Grade Reading Studies." The following year thirteen of the investigating agencies extended their research through the second grade, again under federal sponsorship, and two others continued their research in second grade with non-government funding. This large-scale venture into cooperative research in reading acquired its initial impetus from a meeting of the Committee on Needed Research in Reading, a sub-committee of the National Conference on Research in English, which met at Syracuse University in 1959. Additional thrust was given to the plan in October of 1960, when the group met again, this time at the University of Chicago, to set the guidelines for a cooperative investigation of beginning reading instruction. Following the Chicago meeting William Sheldon and Donald D. Durrell spend several months each in efforts to gain the support of the U. S. Office of Education for the research design which the committee had developed.

In the presentation which follows this one, Professor Sipay will doubtless explain that the plan for the "First Grade Studies" did not follow the design submitted by the NCRe committee. Nevertheless, the original motivating force for the first and second grade cooperative research was provided by the National Conference on Research in English, and it seems appropriate for the NCRe to attempt to identify the benefits which reading instruction particularly and American education generally have derived from the two-year project.
Viewing the cooperative reading research project nearly two years after the completion of the second grade phase, its contributions seem to fall at three levels. The first to be considered are the subjectively identified benefits, such as the establishment of certain precedents for this type of research. The second apparent level is occupied by generalizations about school and classroom procedures--generalizations supported by observations, and in some instances, by recorded teacher and supervisor opinions. The contributions listed at the third level are those which are based on the objective data collected by the various research workers in their several projects--affirmation of the sex differences in reading readiness test performance, for example.

Of the subjectively-appraised benefits of the cooperative reading research project, certainly one of the more satisfying to the members of NCRE is the establishment of a precedent when the U. S. Office of Education finally agreed to support this type of research activity. As hinted above, Sheldon and Durrell had spent many months each in the effort to "sell" the cooperative research package to the U. S. Office, and even though the package which the Office eventually bought was not the one that NCRE wanted to sell, the financial endorsement of the cooperative research approach was a significant breakthrough.

As a means of making the impact of the twenty-seven first grade studies greater than the total of their individual contributions, a second benefit of the cooperative research concept had to materialize: the establishment of a coordinating center with U. S. O. E. support. The Coordinating Center at the University of Minnesota represented another "first" in the field of reading research, since it brought together for
analysis collections of data from all the individual projects. Thus, certain generalizations could be based on a sample in excess of 20,000 pupils instead of twenty-seven samples averaging less than a thousand cases.

Another contribution of the cooperative research venture is that it provided examples of research of varying types, level of sophistication, and degrees of precision. For those in the profession who need research examples either for use in classes or for the guidance of students working on dissertations, the reports of the first and second grade studies provide both good and bad models. On the one hand, much of the reporting of Robert Dykstra constitutes the sort of scientific writing that young graduate students can emulate profitably; on the other hand, one of the first grade studies was apparently so haphazardly conducted and is so badly reported that it is almost a "textbook case" of incorrect research practice. Fortunately, there is more good practice and reporting represented in the various summary accounts, but graduate students and other active or prospective research workers can learn from bad examples, at times, so even the weak links in the cooperative research chain can be viewed as contributions.

The generalizations about improvement of teaching and supervisory practices—the second level mentioned above—are those which would probably be most satisfying to the average taxpayer; and indeed, if benefits were to be judged in terms of impact upon participating school systems, this middle category of contributions would be the important one. Some of the observations concerning influences upon teachers and administrators can be supported (not proved) by data taken from questionnaires and inter-
views, but much of it is based on observation and experienced judgment.

It is almost inevitable that teachers, working in experimental class-
rooms under the close supervision of the research directors of their re-
spective projects and with at least occasional inspiration from outside
professionals, would function more efficiently than in classrooms where
these extra stimulations did not apply. Many of the teachers in the
various studies were assigned to teaching reading by methods and/or
materials which they had not used previously. In addition to the special
effort normally expended in the utilization of new materials, there was
the extra motivation provided by the awareness that the supervisory staff
was paying special attention to procedures and the further knowledge that
the results of the year of instruction would be evaluated much more in-
tensively than usual. Besides the motivational boosts, teachers were
aided in efficiency by special meetings with the authors and developers
of materials in some cases and by evaluation specialists who defined the
conditions and materials of appraisal. Even the teachers who were involved
in the traditional "control" classrooms attended stimulation meetings and
were given extra supervisory help in the attempt to minimize the Hawthorne
effect. Under circumstances such as these, certainly most teachers would
be more efficient than if the "supercharging" forces were not present.
Perhaps it is even reasonable to assume that some of the effects of this
extra motivation have not entirely disappeared in the ensuing years.

In the matter of evaluation alone, the impact of the first grade
studies must have been considerable. Prior to the experimental year,
most first or second grade teachers would have had only a casual know-
ledge of the fundamentals of evaluation and appraisal. Involvement in
the cooperative research enhanced their understanding of appraisal
techniques and materials in several directions: (1) they were forced to scrutinize the objectives of both the total program and the short-range planning; (2) they found themselves examining materials and evaluation procedures in terms of their goals and objectives; (3) they were confronted—to a greater extent than usual—with the limitations of some of the typical measures, such as reading readiness tests; and (4) in some projects, teachers and supervisors were involved in developing local instruments and techniques for appraisal. Some reviewers have argued that the use of "home-made" tests and other evaluation devices weakened the first grade cooperative research. From the standpoint of scientific objectivity and input into the Coordinating Center, the use of locally developed materials was unquestionably a limitation, but in terms of the in-service education of the participating teachers, the process of developing such measures was a distinct asset.

Another benefit to the participating school systems emerged as certain teachers learned to use supplementary methods and materials which they had ignored previously. For example, the study in Cedar Rapids, Iowa included a literature-based approach to beginning reading with certain of the Little Owl books functioning as the basic instructional material. Not only did this expose certain Cedar Rapids teachers to a different methodology and materials, but they had the advantage of several consultations with Peggy Brogan during the course of the experimental year.

More than half of the directors of the twenty-seven first grade projects were university professors, almost all of whom were well-versed in research theory and practice. Another contribution of the cooperative
research activity, therefore, was the increase in teacher awareness of the role of research in educational practice and curricular modification. As teachers and supervisors became aware of the conditions necessary to ideal educational research, they also realized that some experimental variables are very difficult to control. For example, teachers discovered—along with the project directors—that control of daily reading instruction time is almost impossible in a study which involves many teachers in different school buildings.

The third category of contributions of the cooperative first and second grade studies includes the data-based findings which should influence educational practice in the future. Some of these findings could be considered affirmations of concepts regarding reading instruction and education in general, and include the following:

a) Knowledge of letter names and ability to differentiate between word sound were the better predictors of reading success as measured.

b) No one pupil characteristic (knowledge of letter names, for example) was so vital that weakness guaranteed non-success in learning to read.

c) Minor variations in class size did not seem to affect learning (teaching) efficiency.

d) The younger first graders learned to read slightly better than their older classmates.

e) The length of the readiness tests was highly related to their predictive efficacy.

f) Girls manifested more readiness for beginning reading than boys.
g) Measured reading achievement at the end of grade one was highly correlated with measured reading ability at the end of second grade.

In addition to the support for the preceding seven commonly-accepted generalizations, the cooperative research provided evidence concerning the following views which were not as generally endorsed in the profession:

a) Performances on individual oral reading tests correlated highly with performances on group silent reading tests.

b) Children who were skillful at reading phonetically consistent words were also skilled in reading the phonetically irregular words.

c) The high correlations between the measures of reading achievement indicated that end-of-first-grade reading ability is basically a function of a small number of skill factors—probably of (1) ability to recognize words and (2) ability to attach meaning to the recognized words.

d) The indices of teacher effectiveness were only slightly related to reading achievement. Since, however, there were definite teacher 'class' differences in achievement within a given method of instruction, the validity of the teacher efficiency ratings must be questioned.

e) None of the types of instruction seemed to favor either sex, although the greater initial readiness of the girls carried through to greater reading achievement at the end of grade one.

Perhaps the most significant conclusion reached by the staff of the Coordinating Center is one which is not easily assigned to the foregoing categories: future research in beginning reading should focus on teacher characteristics and learning environment characteristics rather than on methods and materials. This important implication of the cooperative re-
search has been incorporated into the philosophy of many professional educators for some time, but in the interest of circulation the mass media have magnified the controversy between analytic and synthetic methods and materials, and altogether too many teachers and administrators have been conned into looking into the magnifying glass. If the results of the cooperative reading research projects in grades one and two can cause a shift in research emphasis away from the artificial controversy between whole-word and word-analysis methods and toward the scrutiny of teacher traits and learning situation qualities, they will justify the million and a half dollars the U. S. O. E. has invested in the total project.