     Review of research literature has led to the conclusion that it is the teacher,
more than the material, the method, or any other variable, that makes the greatest
difference in children's reading achievement. Measuring teacher abilities and
effectiveness is, however, a difficult if not impossible task unless teaching is defined
in terms of teacher behavior as related to pupil behavior and cognitive aspects of
learning. Future research should be concerned with (1) formulating a broad and
inclusive concept of reading maturity, (2) making decisions on how to measure
correlates of reading growth, (3) ascertaining teacher characteristics and behavior
which are most effective in promoting these assumed factors or variables, (4)
subjecting each assumed factor to measurement and determining its relation to pupil
growth in reading, and (5) using all of this information to improve programs of
teacher education in reading. References are included. (MD)

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THE TEACHER VARIABLE IN THE TEACHING OF READING

Certainly all educators are committed to increasing the
level of achievement of their clients whether they be children,
young people, or adults, and whether the area be mathematics,
science, or foreign language. But with reading a high level
of performance is so important that no stone can be left un-
turned in our search for ways of facilitating growth and devel-
opment. Society may raise only an eyebrow for one's inadequacies
in spelling, mathematics, or ability to speak a foreign language;
but in one way or another it castigates an individual who cannot
read or read effectively.

It is no surprise, then, that to improve reading we have
instituted research in all directions. Instructional materials
have been examined and improved and new ones developed. Reading

methods have been searched and researched, and the search con-
tinues for ways of improving instruction. Teacher education
institutions have sought to strengthen their reading program by
adding courses, modifying course content, or providing learning
experiences that will strengthen the preparation their graduates
are receiving. And above all, government funds have been poured
into studies, programs, and projects, designed to discover ways
of improving the level of reading attainment on all academic
levels.

One of the best-known government sponsored studies is the
Cooperative Research Program in First Grade Reading Instruction,
reported in detail in the Reading Research Quarterly (4). The
master study, you recall, involved twenty-seven individual
studies carried on in various places in the United States, and
attempted to discover if there were an approach to initial
reading instruction that would produce superior reading and
spelling achievement at the end of grade one. Instructional
approaches currently in use, including the linguistic, basal,
language-experience, and i.t.a., were evaluated in terms of
objectively measured reading achievement.

Though the study has some inherent limitations, its
findings and conclusions are significant in relation to pupil
achievement, and its implications for teacher education are co-
gent. It is to the issue of teacher education that I would like
to direct my comments this afternoon, and what I shall have to
say grows directly out of the recommendations of the First Year
Study.

In the first place the study points out that children seem to learn to read by a variety of materials and methods. Accordingly, the authors state, "...no one approach is so distinctly better in all situations and respects than the others that it should be considered the one best method and the one to be used exclusively." (5). In other words, improved reading achievement does not appear to be a function solely of approach or method. And then the authors continue, "Future research might well center on teacher and learning situation characteristics...." The tremendous range among classrooms within any method points out the importance of elements in the learning situation over and above the methods employed. To improve reading instruction, it is necessary to train better teachers of reading rather than to expect a panacea in the form of materials. (6, italics mine).

A similar statement has been made by others. Ramsey, in an evaluation of three grouping procedures for teaching reading concluded, "The thing that the study probably illustrates most clearly is that the influence of the teacher is greater than that of a particular method, a certain variety of materials, or a specific plan of organization. Given a good teacher other factors in teaching reading tend to pale to insignificance." (15).

A very recent study (10) reported by Harris and Morrison reiterated the conclusions of the two other studies. These authors reported a three-year study and a replicated two-year study of two approaches to teaching reading, basal readers vs. language-experience. They found as did Bond and Dykstra that differences in mean reading scores within each method were much

larger than differences between methods and approaches. They write, "The results of the study have indicated that the teacher is far more important than the method. Costly procedures such as smaller classes and provision of auxiliary personnel may continue to give disappointing results <u>if teaching skills are not improved.</u> It is recommended, therefore, that in-service workshops and expert consultive help be provided for all teachers and especially for those with minimal experience." (p. 339, italics mine).

In other words, these studies seem to be saying clearly-- to improve pupil achievement in reading, one should look first at the teacher and his training. This, then, puts the responsibility squarely upon the shoulders of those who are engaged in teacher education, both pre- and in-service--teachers of methods courses, supervisors of practice teaching, and school- and system-wide reading supervisors, both elementary and secondary.

But to look at the teacher and his training poses a question in need of an answer. What teacher characteristics or teaching behaviors appear to differentiate the effective teacher of reading from the ineffective one? What seems to make a difference between "good" and "poor" reading teaching? Knowing the answers to such questions as these would make it possible for us to select as reading teachers those with certain characteristics or to prepare teachers with certain skills and understandings that appear to be associated with maximum pupil growth.

The writing and research in the areas of teacher education, teacher effectiveness, and teaching behaviors are voluminous, almost as voluminous as those in reading. And like the research in reading, their findings frequently leave much to be desired. I can certainly agree with Jackson (11) who writes, "...Almost all of the noble crusades that have set out in search of the best teacher and the best method...have returned empty-handed. The few discoveries to date...are pitifully small in proportion to their cost in time and energy. For example, the few drops of knowledge that can be squeezed out of a half century of research on the personality characteristics of good teachers are so low in intellectual food value that it is almost embarrassing to discuss them..." (p. 9).

Part of the reason for the disappointing results, at least insofar as reading is concerned, is that the researcher was attempting to identify the good teacher and good teaching rather than the good teacher and good teaching of reading. And I have good reason to believe they are not the same. As a result we have described for us a kind of invisible, ghost-like person who, in fact, may not exist. She (he) has been found to be cooperative, sympathetic, and poised. She is well-groomed, healthy, imaginative, and cooperative. She gets along well with her co-workers and her principal, and she gets her reports in on time. As one of my friends said, "She has the same characteristics we would expect to find in a good bar-girl." We know nothing of what this person does in a reading class nor do we know anything about the achievement of her

pupils. In short, the studies tell us little that we can put into the context of reading or that gives us helpful clues in planning programs of teacher education. Let me illustrate from several studies.

A widely quoted and certainly monumental study of teacher characteristics is the study reported by Ryans (16). Ryans attempted to identify the general personal or social characteristics that would distinguish groups of teachers receiving high and low assessments as indicated by a self-report inventory and observations of classroom behavior by trained observers. Three dimensions of teacher classroom behavior were identified; namely, "X"--warm, understanding, friendly vs. aloof, egocentric, restrictive; "Y"--responsible, systematic, vs. unplanned, slipshod; "Z"--stimulating, imaginative vs. dull, routine. Further studies with the Teacher Characteristics Scale indicated that the "highly assessed" teachers received more favorable opinions of pupils and administrators than "low assessed" teachers, and that pupil behavior was rather closely related to teacher behavior, at least on the elementary school level.

A group of studies growing out of the work of Flanders and his co-workers (8, 1) deal with the development and use of a system of interaction analysis. Verbal behavior of teachers in the classroom was studied by trained observers and categorized as indirect (eliciting creative and voluntary pupil behavior) or direct (eliciting conformity and compliance). An indirect-direct (I/D) ratio was derived for each teacher studied.

The rationale for the study of classroom interaction rests on
the assumption that certain kinds of teacher statements, those
that indicate acceptance, encouragement, and praise, encourage
student participation, while other kinds indicating commands,
criticism, statement making, and the like, inhibit student
participation. The degree and quality of student participation,
in turn, affects achievement. In verification of these as-
sumptions Flanders was able to show that in seventh and eighth
grade social studies and mathematics, students who were taught
by teachers with a high I/D index achieve to a greater extent
than those taught in a direct manner.

In another study conducted by Amidon and Giammatteo (2)
the authors were able to show that elementary teachers selected
as "superior" by their supervisors and administrators showed a
higher incidence of indirect teacher-talk when teaching language
arts than that used by a randomly selected group of teachers.
The authors conclude that, "The results...would seem to indicate
that verbal behavior patterns of superior teachers can be iden-
tified and that these patterns do differ markedly from the ver-
bal behavior patterns of other teachers." (p. 285).

Meux and Smith (13) have developed still another approach
to identifying significant teaching behaviors. They classify
teaching behavior in terms of its logical qualities through
observation of the teacher in the classroom. Classroom inter-
action is categorized into "logical dimensions of teaching" in-
volving such functions as defining, describing, stating, ex-
plaining, etc. on the assumption that classroom discourse may

be identified and analyzed in terms of rules of logic. On
the basis of their analysis procedure they are able to show
that increased pupil understanding and improved thinking
ability are outcomes of instruction where teachers are taught
to handle the logical operation involved in teaching.

The studies to which we have referred make important
contributions to our understanding of what is involved in
teaching, and could be justified solely on that basis.
Teaching on any level is multi-dimensional and we need studies
that will enlighten us as to the nature of the process. Yet
looking at these studies for information relative to ways of
improving reading instruction, and thereby pupil attainment,
provides little that would be helpful.

In the first place, the teacher is being studied as a
generalist, nonspecific to any teaching area or any grade level--
elementary or secondary. Yet we know that there are differences
among teachers in the way they handle given instructional areas
and levels. A third grade teacher teaching in a self-contained
classroom may be a very effective science teacher, but leave
much to be desired in the way she handles reading. Or an
eighth grade teacher may very skillfully teach reading through
his literature, but would be completely lost as a teacher of
second grade reading.

In the second place such studies as those mentioned have
failed to give us any information about the teacher's teaching
procedures, the content she teaches, the understandings she
must have, or the commitment she has made to clinic teaching.

It is conceivable that an observer might make use of one of
the interaction analyses and derive for a fourth grade
teacher a high score while observing an oral-reading-round
class. The teacher-talk is at a minimum, she asks questions,
she is accepting of the child's responses, she praises and
encourages, yet who would accept this as an effective way of
conducting a reading lesson. Or in another situation the
teacher may be well groomed, poised, efficient, gracious, and
get along well with her co-workers and principal, and yet never
have had a course in the teaching of reading.

In the third place these studies are concerned only in-
directly with the product of teaching, that is, changes in
pupil behavior or with the cognitive aspects of learning in
the way of skills, abilities, understandings, etc. It is not
until we have seen the results of teacher characteristics or
interaction, or behavior, or whatever, on pupil development
that we will have something that we can use in teacher education.

Not for one minute are we deprecating the value and sig-
nificance of the studies to which we have referred. They have
and are making a contribution to our understanding of the
teaching process. I am certain that the researchers, themselves,
would say that the studies are not designed to provide the kind
of teacher education help to which we have referred. This
being true we need, then, a different research approach. At
least we need to ask different kinds of questions that will
give us different kinds of answers, answers that we can use in
developing our pre- and in-service teacher education programs.

Coming somewhat nearer to the type of studies we need in reading are those being carried on by Turner and Fattu (18) at the University of Indiana. These investigators see teaching behavior as problem solving ability involving the use of learning sets and specific responses relevant to the teaching situation. In reading, a "Teaching Tasks in Reading" test was developed, assessing a teacher's understanding and application of skills in such areas as selecting appropriate instructional materials, grouping children, judging improvement, diagnosing word perception and the like. The authors found that the test differentiated between preparatory teachers, student teachers, and experienced teachers. It was interesting to find that their studies substantiated the observation that teaching skill in one area (reading) was not necessarily indicative of the level of performance in another (arithmetic). Moreover, they found that a given teacher may not perform evenly in a single curricular area when different problems were encountered.

A more recent side study (20) was reported by Turner who found that an analysis of the data derived from a Teacher Characteristics Schedule (measuring nine selected personal-social characteristics such as friendly, organized, stimulating, child-centered, emotional adjustment, etc.) and a combined Mathematics teaching Task and Teaching Tasks in Reading scales made possible the identification of teacher characteristics associated with given types of problems of beginning teachers (discipline, management, forming instructional groups in reading, pupil expectancy, etc.). For example, teachers who had problems in

reading appeared to be disorganized, to lack warmth or friend-
liness and a high level of imaginative behavior, and failed
to have a favorable attitude toward democratic procedures.
Turner suggested that a set of measures could be assembled by
which problems of beginning teachers could be identified, and
through counseling and in-service activities, steps could be
taken to alleviate them.

The work of Bush and Gage (7) at the Center for Research
and Development in Teaching at Stanford University should be
watched with interest, in view of the fact that one of the
areas they are investigating is that of teacher behaviors and
characteristics and their relationships to pupil achievement
and changes. In fact, they indicate that one of their long-
term goals of one project is to define a set of skills for ef-
fective teaching, to determine the effects of those behaviors,
and to determine how to train teachers to use those skills.
As a project effort this approaches the thing that I am con-
cerned about. It will be interesting to note whether their
"skills for effective teaching" will be general or whether
they will be differentiated for various instructional areas
and levels.

Lacking information about teacher competencies and related
student behavior that could be translated into the context of
reading, I would like to suggest a study or series of studies
that might provide the needed information. I think we would
have to admit that without research evidence all of us in
teacher education have been operating pretty much on a series

of hunches, on empirical evidence rather than objective. It
may well be that if and when we do have the research evidence
that clues us in on what "good" reading teachers do that "poor"
ones do not, we may find only that our hunches have been con-
firmed. But at least we will know that.

Thinking about the two basic undergraduate courses, one
for elementary teachers, the other for secondary, offered at
our institution, here are the areas in which I would like in-
formation that would provide an objective base for what we try
to do. First, I need consensus on the skills, abilities, under-
standings, and behaviors that we expect a mature reader to pos-
sess. Next I need to know the abilities, skills, knowledges,
and competencies that a teacher will need to have if she is to
promote sequential growth toward those desired learner compe-
tencies. Finally, I need to know the teaching procedures, the
course content, the learning activities that I should use in
my education classes in order to develop those teacher
competencies.

To secure these kinds of information obviously requires
a series of studies, each with the necessary research design
that will yield appropriate findings from which conclusions
may be drawn. It will be a prodigious task, but I am as cer-
tain as I am of anything in the reading area that Bond and
Dykstra, Ramsey, and Harris and Morrison are right in saying
that to improve reading achievement our efforts must be placed
on the improvement of our teacher education program. This is
our frontier for exploration. Believe me, I am not unaware of

the problems to be encountered, but they should not deter us from action.

Let me try to indicate the broad steps the studies may take:

1. Formulating a broad and inclusive concept of reading maturity. By this I mean goals, or more appropriately, a series of goals, toward which reading instruction and guidance should be directed. I say, "broad and inclusive" because the goals must be more than ability to perceive words and comprehend meaning. I used the term, "maturity" not as a final point to be attained as an adult, but rather as a series of maturities, for a third grader may be a mature reader (i.e. meet the normal expectations for a child completing his third year in school), or he may be a mature reader going into high school, with yet a distance to go on a scale of maturity. Maturity is considered a process, a series of expanding concentric circles, rather than a final point on a scale.

Coming to a decision with regard to what is involved in reading maturity will be no small problem, to begin with. However, spade work in this area has been done by Gray and Rogers and described in their Maturity in Reading--Its Nature and Appraisal (9). If you have read this monograph, you will remember that the authors defined reading maturity in terms of five dimensions: interest in reading, purposes for reading, recognition

and construction of meaning, reaction to and use of
ideas, and kinds of materials read. Each of these
five dimensions was broken down into specific criteria
which in turn, were assessed on a five-point scale.
The authors of this study applied their scale to
adults. Obviously if the idea is used with elemen-
tary and secondary aged children, intermediate ma-
turity points would need to be established. Deter-
mining objectives for a reading program is little
different from deciding where one is going on a va-
cation trip. One needs to know his destination
before he backs the car out of the garage.

2. Making a series of decisions with respect to how the
   several correlates of reading growth referred to in
   #1 will be measured. Apparently some of the areas
   may be measured by objective tests, others by ob-
   servation, others by rather subjectively determined
   points on a scale. Suffice it to say that the ulti-
   mate criteria of the adequacy of a reading program
   and the effectiveness of teaching will need to be in
   terms of changes in the individual, with changes very
   broadly construed as indicated, but quantitatively
   assessed, none the less.

   I am cognizant that learner change as a measure of
   teaching effectiveness has been avoided in the studies
   of teaching chiefly for the reason that it is difficult

to measure. Substituted for it have been evaluations
by principals, supervisors, peers, and even pupils.
But in reading instruction we cannot compromise. The
teacher is either good or poor in terms of what hap-
pens to the child. The principal as an evaluator is
likely to be a questionable one, for he evaluates the
generalist rather than the teacher of reading. Fre-
quently he has never had work in reading and his as-
sessment of the goodness of instruction may be in
terms of his own biases and misinformation.

3. Ascertaining teacher characteristics and teaching
practices assumed to promote in the most expeditious
and effective manner the kinds of changes and types
of growth decided on in #1 and measured as in #2.
Here the researcher's efforts will be in identifying
the teacher variables that might differentiate the
effective from the ineffective teacher. This could
be done by making a series of kinescopes of reading
instruction on a given level taught by a number of
different teachers. Experienced observers would
examine the tapes in terms of the concept of maturity
established in #1 to see if they would be able to
identify and classify such factors as teacher talk,
competencies developed, teaching style used, provision
for individual needs, and the like.

4. Subjecting to measurement each assumed factor or
teacher variable determined in step #3, and through

experimentation determining its relation to pupil changes or growth in the various dimensions and levels of the mature reading act as established in #1 and measured in #2. One might attempt in this step to identify groups of high and low achieving children, holding constant such factors as intelligence, socio-economic background, etc., and observe the teachers and their teaching to see if in truth the assumed variables determined in step #3 differentiate the teachers of the high achieving pupils from those of the low achievers and to what degree. Or one could identify groups of teachers having and failing to have the variables derived in step #3, and determine if the pupils taught by those teachers were differentiated in terms of reading maturity. It is through step #4 that we should be able to indicate that a teacher who possesses certain characteristics, who uses certain techniques and certain types of instructional media, and who provides in certain ways for the differentiated needs of children, will stand greater chances of having learners who are higher on a scale of reading maturity than teachers who do not have these characteristics and understandings, and who do not perform these instructional acts.

5. Using the information provided through step #4 to improve the program of teacher education in reading. Since one now has objective evidence that certain

teacher characteristics and understandings and certain
teaching practices are productive of a higher level
of pupil maturity than others, he can now begin to
employ this evidence in his teacher education program
in reading. One may discover that he needs to give
more or even less emphasis to certain instructional
areas than he did before. He may need to provide
certain kinds of learning experiences to develop
needed teaching competencies. In fact, a new di-
mension of research opens up for the teacher educator.
Having evidence that teachers need to possess certain
understandings and do certain things in certain ways
to bring a desired level of achievement in their
pupils, the teacher of the "methods" course finds it
incumbent to discover the best ways to prepare his
teachers in training. Answers will be needed to such
questions as the following: How effective is lecturing
in relation to other procedures? Will a four-minute
single concept audio-visual tape be as much help as
a thirty-minute film? How effective is microteaching
in producing a particular understanding? Can one use
effectively a group of students from his methods class
to serve as a simulated group of third graders to
demonstrate a given technique? Armed with the kinds
of information described, one can begin to say with
some degree of assurance that as a teacher of reading
teachers we have taken significant and objectively

derived steps toward improving the quality of
teaching, and thereby the quality of reading that
children, young people, and adults are able to do.

Teacher education is a rich and rewarding area
within which to work. As for myself I would choose
no other. We know now that the reading that children
and young people do will not be improved by the ad-
ministration of a capsule, by facilitating their
creeping and crawling, by the use of a machine, or
by method "x." We can give up these searches and
concentrate on what we surmised was the case all along--
that improved reading is the result of improved
teaching, and in that pursuit many of us have a major
stake.

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