The back-to-basics movement cannot realize its full potential until the characteristics of the effective teacher are identified. Future research should identify these characteristics through comparisons of students' actual reading growth with their expected reading growth and should focus on the variables of the instructional process employed by effective teachers. Methodological aspects of research must relate to an understanding of the problem and not to the sophistication of the research design. In addition, both cognitive and affective dimensions of reading instruction should be considered. (RS)
Identifying the Effective Reading Teacher: Considerations for Teachers and Researchers

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What is meant by the term "effective?" Other occupations and professions use the term frequently. An effective physician is one who heals the sick. The plumber who fixes a leaky pipe is effective. The drycleaner who removes unwanted spots from clothing is effective. A basketball coach who wins more games than he loses is effective. The list is endless. In these cases we seem to know which criteria to use in determining who is effective and who is not. These criteria, in most instances, deal specifically with a tangible product. One does not refer to these individual's talents in terms of how elegant the process they use might be independent of a consideration of the quality of the "products" that is an output of that process. When the final product is satisfactory, these people are judged to be "effective."

As a contrast, in education when we do focus on the product we do so only with qualifications. Pupils who do not learn are not the fault of the teacher, but the fault of their home background, socioeconomic status, and so forth. If pupils learn in spite of these "educational handicaps" teachers can claim the credit. If they do not learn the scapegoats are available to provide a ready explanation.

In defense of teachers, one must recognize that there is more to teaching than assuring all children learn basic skills such as reading. Teachers must properly deal with affective dimensions as well as cognitive. Helping children to develop emotionally and socially is, perhaps, as important as helping them learn the basic skills. However, affective development, as with all of the teacher's responsibilities, should complement skill development. It is not a one or the other proposition. Education should seek a
realization of both ends.

Indicators of past instructional emphases suggest the possibility of too much concern with variables other than learning. Much of this evidence points to a decline in levels of measured learner attainment levels. Analysis of reading scores on the most recent National Assessment of Educational Progress (NAEP) suggest minimal progress from the 1970-71 data (Neil, 1976). Elementary children showed slight improvement and intermediate and secondary school students showed a slight decline in reading skills. The 1975-76 verbal scores on the Scholastic Aptitude Test (SAT) were lower than in last years. Although the difference was only three points, it still reflected a decline in student's performance.

In contrast to the slippage in these achievement scores, gains have been reported along dimensions related to self concept. For example, results of the SAT descriptive questionnaire revealed that students were very self-confident. Eighty-eight percent believed that they were above average in their ability to get along with others, 69% in leadership, and 68% in organizing for work (Hagan, 1976). The results of the questionnaire offer some insight into instructional emphases of public education over the last 10 to 12 years.

The traits that the students possessed are desirable. They facilitate functioning in society and are recognized as important. Even though these are desirable characteristics they do not assure students can write well, read with understanding, express themselves orally, and so forth. Certainly teachers cannot be blamed totally for overemphasizing areas of student affective development at the expense of learning basic skills. In the late sixties and early seventies concerns for human dignity in the society at large
led schools to re-emphasize interpersonal relations and responsible social development. Teachers were exhorted to develop the total child, and they did. But it appears that this was accomplished at the expense of basic skill development. A new movement, now gaining impetus, seeks to correct pupils' lack of academic abilities. The cry "back to basics" sounds from Maine to California. Parents, academicians, administrators, and others pressure teachers to teach the basic skills. Hopefully, the experiences of the sixties will temper the zealots and provide assurance that both cognitive and affective dimensions receive proper consideration.

The back to basics movement cannot realize its full potential until characteristics of the effective teacher are identified. One of the most basic skills, as viewed by educators and society, is reading. Thus, improvement of reading instruction is of crucial importance. If the process variables employed by effective reading teachers could be identified, this information could serve as a guideline for training preservice reading teachers and conducting inservice education programs. Research has yet to accomplish the identification of the effective reading teacher. Presently, much of the information on effective reading instruction is bits and pieces of research or expert opinion, neither of which provide definitive process variable guidelines. Several plausible explanations account for this dearth of concrete instructional process guidelines to assure that the reading instruction offered is most likely going to be effective. Among these are the variables under investigation, criteria for determining effectiveness, and research methodologies employed.

Researchers may be looking at the wrong variables due to variable accessibility. The majority of the variables investigated are generic, rather
than instructional process variables. Generic variables such as warmth, college grades, personality, and so forth are easily identified. One needs only to define warmth as a characteristic evidenced by certain behaviors. Take a measure on this characteristic with several reading teachers and compare the "warm" teachers' students reading achievement with the "less warm" teachers students' reading achievement. If the "warm" teachers' students exhibit a significantly higher level of reading achievement than the "less warm" teachers' students, then "warmth" is a characteristic of effective reading teachers. The value of such research must be questioned in respect to two important considerations.

First, generic variables are not amenable to outside intervention. It is difficult to identify acceptable definitions for them while implementing instruction aimed at assuring preservice and inservice teachers will develop them. Investigations focusing on generic variables imply that it is not how the reading skills are taught, the process variables, but characteristics of the teacher that assures effective reading instruction. One could probably take a measure on hair length, identify long hair teachers and short hair teachers, measure these teachers' students' reading achievement, and possibly find significant differences in reading achievement favoring the long hair teachers. Does this mean that to improve teachers' reading instruction one should encourage them to let their hair grow? Hardly. Logic suggests that it is the instructional process variables that teachers use to teach reading that makes a difference in students' reading achievement, not vacillating characteristics which defy definition and, as such, are unreliable.

Second, when one investigates the effect of generic variable on students' reading achievement and finds significant differences, there is the
danger that the results may be spurious. A frequently used approach in teacher effectiveness research is to assign teachers to a control or experimental group, pretest students' reading achievement, administer treatment to the experimental group, posttest students' reading achievement, and test for significant differences between students' reading achievement. If significant differences are found in favor of the experimental teachers they are deemed "effective." Even if a covariance technique is used to assure that the differences can be accounted for by the treatment, the investigator is in a tenuous position to identify the experimental teachers as effective. Investigations of this type consider students' reading achievement after the fact. That is, the teacher is deemed effective if she produces greater reading gains in her students than a teacher who produces lower gains. The results of such research only allows one to refer to effectiveness of reading instruction in relation to the relative effectiveness. True, teachers who produced the greatest growth in reading achievement are more effective than teachers who produced a lesser growth, but if one accounts for students' expected level of achievement, neither group of teachers may be effective.

Students' expected reading achievement in comparison to actual should be the criteria for determining teacher effectiveness. For example, if a class is expected to average one month of reading growth for each month of instruction and at the end of three months they have advanced six months in their reading growth, then their teacher is most likely an effective teacher of reading. The type of research discussed above does not consider where the students should be reading, but considers only the observed differences between two groups. As a result, over a six week period the
control group may have exhibited two weeks of growth, contrasted with five weeks of growth for the experimental group. However, if one first determined expected rate of reading growth they could discover that both groups should have gained six weeks in reading for six weeks of instruction. Thus, comparing expected rate of reading growth with the actual, neither teacher is effective even though significant differences were found.

Criteria that account for expected achievement in comparison with actual reading achievement should be used to identify the effective reading teacher. This procedure eliminates, or reduces considerably, the chance that research findings are describing only a relative degree of effectiveness. If one were to first identify effective teachers, then they could investigate process variables that might account for their effectiveness. There are two procedures that are appropriate for identifying effective teachers of reading, least squares prediction line and expected mean monthly growth. Both of these use the actual mean reading achievement of a class to predicted expected achievement following a period of reading instruction.

An example of the least squares prediction method would be to take the mean reading achievement and mean IQ scores for all sixth grades classes in a school system and use these to compute a line of best fit (prediction line). This line of best fit is the expected reading achievement level for sixth-grade classes, in a school system, in relation to their mean IQ. Thus, a teacher who class has a mean IQ of 100 might predict that her students should be reading at the 5.2 grade level. By comparing her students' actual end-of-year reading achievement with the predicted she, or a researcher, could determine if the class was significantly above what was expected. If the actual reading achievement was 6.3; then, in comparison with the expected of
5.2, this teacher could be identified as effective. Following this identification, one could now identify process variables that may account for the observed difference, gather data on a yearly basis to determine the stability of effectiveness, investigate the generalizability of this teachers' instructional process variables, and so forth. The advantage of this procedure over one which determines teacher effectiveness after the fact, is that reading teachers are first identified as effective and their identification relates directly to the school system in which they are teaching.

Expected mean monthly reading growth is similar to the use of a prediction line, but eliminates the use of the IQ score. A class entering the third grade in the fall most likely was administered a reading achievement measure in the spring of the second-grade. Their mean reading achievement score on the second grade assessment is divided by the total number of months of reading instruction up to the point of that assessment. For example, if their mean reading achievement score was 2.0 and they received 10 months of reading instruction in first-grade and 10 months in the second; 2.0 mean reading achievement divided by 20 months of instruction equals a mean monthly reading growth rate of .1. After five months of reading instruction in the third-grade one would expect the class reading mean to be 2.5. The expected reading achievement can be compared with the actual, which is determined by administering an assessment measure equivalent to the first. If the mean actual reading achievement is 3.0; then, it is considerably above what was predicted and the difference can be attributed to the effectiveness of the teacher's instruction.

Contained in the above were implications that currently used research methodologies may be inappropriate for research aimed at identifying the
effective reading teacher. Specifically, the variables under investigation and the criteria for determining effectiveness were questioned. In addition to these considerations, researchers should avoid becoming incarcerated in their methodological procedures.

Methodological incarceration is a syndrome exhibited by most researchers at one time or another (the author included). It occurs when the sophistication of the research design takes precedence over the variables under investigation. Thus, moving closer to a better understanding of the problem becomes secondary to sampling techniques, instrument development, treatment, data analysis, and so forth. Admittedly, all of these are important considerations in research. The issue, however, is not whether to ignore or adhere to traditional research methodology, but to employ those that deal directly with the problem under investigation. For example, an alpha level equal to or less than .05 has traditionally been used to accept or reject hypotheses. For teacher effectiveness research in reading this level of significance may be inappropriate. Also, adherence to this level of significance could account for our lack of information on what is an effective reading teacher. An alpha level of .05 means that one can be sure that 95 times out of 100 the event is going to occur. In life or death situations, a .05 probability is too high and .00001 is better. However, in moving toward an understanding of what instructional process variables are effective in producing students' achievement in reading, an alpha of .05 may be too low.

A level of significance of .05 or less in teacher effectiveness research means that if teachers adapt the significantly different process variable it should be effective 95 times out of 100. But so few instructional process guidelines now exist for assuring effective reading instruction than an alpha
level of .20 or .25 may be more appropriate. Effective reading instruction is more likely to result if one could be assured that 75 times out 100 they are properly teaching reading, than to have no guidelines at all.

The above mentioned considerations are important for both teachers and researchers. The recommendations are intended to stimulate consideration of alternative means for investigations related to teacher effectiveness in reading instruction. Briefly stated, the recommendations and considerations included: (1) the effective reading teacher should first be identified in relation to a comparison of actual reading growth with expected; (2) instructional process variables employed by effective teachers should be the focus of investigations; (3) methodological aspects of research must relate to a better understanding of the problem, not the sophistication of the design; and (4) both cognitive and affective dimensions of reading instruction should be considered in effective teacher research.

In addition to these, there are other considerations that must be employed once effective reading teachers are identified and attempts are made to determine what makes them effective. The most important of these is active involvement of classroom teachers. For without teacher involvement, the research results on teacher effectiveness in reading instruction will never realize their full potential.
References
