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ABSTRACT

This document summarizes the highlights of research on teacher effectiveness and concludes with recommendations based on a synthesis of this past work. The various methodologies that have been used are discussed, from rating scales to objective observation techniques, such as OScAR and the ecological studies. The major problems in teacher effectiveness research are examined. Recommendations are that results of: (1) research on presage variables are conflicting suggesting that such research might be suspended for the moment: (2) clearer guidelines regarding ultimacy of product criteria are needed; (3) observational techniques seem to be more behaviorally oriented and more objective than other methodologies; (4) an attempt should be made to integrate, translate, and relate already available materials on teacher effectiveness; and (5) the sub-segments of teacher effectiveness should be understood and quantified before researchers try to unify the whole. (MH)

TEACHER EFFECTIVENESS: A POSITION[1]

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Teacher effectiveness is a concept which is currently enjoying a revival in both psychology and education. The literature of both professions is replete with references to this very timely topic. The state of the art, however, is still very much up in the air and there are some very real questions not only as to what progress has been made but as to what directions research in this area should now take.

There have been many excellent reviews of the research on teacher effectiveness and this paper is not intended to duplicate these. For instance, in 1950 Domas et al. did a 1006-item bibliography which was thought to be comprehensive to that date. Morsch and Wilder summarized the literature in 1952 and reiterated the fact that teacher effectiveness was a very muddy field indeed. In 1963, Ryans reviewed the literature in this area for the past five years and concluded that not much progress had been made in regard to even identifying

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the concept, much less delimiting the parameters. In 1964, Yamamoto reviewed the literature and believed that three summary statements were appropriate at that time: (a) there is no single, simple pattern of characteristics of the "successful" teacher, (b) supervisor ratings of teacher effectiveness quite often do not agree with pupil or colleague ratings, and (c) there is some indication that those teachers who are well-adjusted themselves and who know something about mental hygiene principles are more effective than those who are less well adjusted and who do not know about these principles. Perhaps one of the most succint summaries of the literature was done in 1966 by Kleinman who pointed out that the Ellena summary (1961) disclosed the following facts which still stand:

1. There appears to be only a slight relationship between intelligence and teaching effectivenes.

2. There is only a low correlation between measures of on-the-job performance of teachers and earlier scholarship.

3. There is some evidence that more professional knowledge (National Teacher Examination scores) tends to be associated with more effective teaching.

4. Teachers' rated effectiveness at first increases rather rapidly with experience and then levels off at five years or beyond.

5. There is no substantial evidence that cultural background is significantly related to teaching effectiveness.

6. The relationship of socio-economic status to criteria of instructor effectiveness is low.

7. No particular differences in effectiveness between men and women teachers have been found.

8. There is no evidence that married teachers are in any way inferior to unmarried teachers.

9. Data thus far available fail to establish the existence of any specified aptitude for teaching with any degree of certainty.

10. Attitude toward teachers and teaching shows small positive relationship to teacher success.

11. Interest in teaching measures either cluster around zero or are of doubtful value in predicting teacher success.

12. Quality of the teacher's voice is not considered to be very important by administrators, teachers or students.

13. Lists of traits based on opinion appear largely sterile.

14. For many years research on personality characteristics has failed to obtain profitable data. Kleinman summarized by stating that direct observational data from the classroom would seem to be a logical, obvious method of obtaining data about the teaching profession.

Variables Studied

In 1961, Mitzel suggested in the Encyclopedia of Educational Research that teacher effectiveness could not appropriately be viewed as a single entity and might more profitably be studied as a multiplex concept. He suggested three areas for concentration: (a) process, (b) product, and (c) presage criteria. Ryans in 1960 has derived a similar classification system for teacher effectiveness variables.

Perhaps some of the most outstanding work in process has been that of Medley who with Mitzel in 1959 constructed the Observation Schedule and Record (OScAR) which was based on lists of criteria collected and summarized by Cornell, Lindvall and Saupe (1952) and which looked at several different aspects of what actually goes on in the classroom through the eyes of a trained observer. Through factor analysis they derived three major areas of concern: (a) emotional climate, (b) verbal emphasis, and (c) social organization.

Continuing to look at process, Solomon (1964) did a factor analytic study and derived eight factors which were thought to be a function of teacher effectiveness as seen by use of trained raters, TV tapes and various questionnaires.

Findings regarding product criteria have been somewhat less obvious in the literature. In 1965 Shim did a study of the cumulative effect of teacher characteristics on the achievement of pupils and concluded that there was no significant difference in pupil acheivement to support the idea that an elementary school teacher has to be a superior student in college, to have a degree, to be fully certified or to have many years of experience in order to be successful as far as measured pupil achievement is concerned. There are some data which contradict these findings, however. In one such study McNeil (1967) looked at pupil gain as a function of the teacher's having been supervised by objectives rather than in the traditional methods and found that significant differences did occur in pupil achievement in favor of the teachers who had been supervised by objectives.

One definite problem with using product criteria as a measure of teaching effectiveness is the ultimacy of the criteria. That is, does effective teaching reflect gain in immediate factual knowledge, improved skills of an intermediate nature, or the more comprehensive "success in life" types of skills?

Presage criteria have, perhaps, received the most attention in the literature on teacher effectiveness. One would speculate as to the urgency of the researchers' need to get at predictive criteria when the basic definition of the concept is still not yet clearly in focus. Personality factors, role perception, knowledge, previous academic success, professional preparation, psychological health, cognitive style, vitality, sex, years of experience, position, and various multiples of these such as would be seen in batteries of tests have all been studied at some length with either no conclusive results or, at

best, conflicting results. (Dugan, 1961; Sorenson, et al., 1963; Bible, et al., 1963; Brownell, 1961; Ort, 1964; Beery, 1962; Hall, 1964; Dandes, 1966; Sprinthall et al., 1966; Meisgeier, 1965; Garman, 1966; Morman, 1965.)

Methodologies Used

Rating scales are the most frequently used methodology for studying teacher effectiveness. Of these, the most frequent type is that used by the supervisor. One of the more interesting and illustrative studies in this area is that of Redefer (1963) who looked at ratings made by principals and found that even those who would say that a particular teacher was "good" could not say how they arrived at this judgment and that, while subjective agreement could be obtained, there was little or no agreement as to what components were included in this judgment. Morsch and Wilder (1952) pointed out that fairly good reliability could be obtained regarding supervisor judgment but that validity could not be demonstrated. Blake (1966) ran a 55-item correlation matrix using supervisor opinion as a criterion of success and found that the best predictor was enthusiasm for teaching.

Ratings by students have also come in for their share of research. Hall (1965) solicited nominations from students as to best and worst teachers and found effects of teachers to center around motivation. Mead (1958) makes some interesting comments about the role of the teacher as perceived by the student when she says, "The role of the teacher... is an exceedingly interesting one. The disliked teacher is personalized and vivid; the teacher who has obviously been very successful and has caught the imagination and enthusiasm of the whole class does not emerge as a person at all but, instead sinks into the background of good classroom conditions together with 'good laboratory equipment.'"

As has been previously mentioned, observational techniques are currently being used extensively in investigations of teacher effectiveness. Brain documented the increased use of observational techniques (1965). DeLandsheere

(1963) pointed to the impossibility of evaluating effectiveness of teachers because of the many interfering variables and suggested that an objective description of the behavior of the teacher would be preferable. The notable work of Medley in this area has been reviewed extensively elsewhere and will not be re-reviewed here (Medley, 1959); Medley, 1967).

Perhaps one of the best current illustrations of the wealth of objective data which can be obtained by observational methodology and further applications of these data is the study presented at the 1967 APA Convention by Soar. Soar used the Flanders' Interaction Analysis and a modified form of the OScAR. He then correlated these data with a series of pupil data measures. Soar found that, regarding vocabulary, indirect teacher control produced significantly more growth than direct, and low-hostile classroom produced significantly more growth than high-hostile classrooms did. Considerably different results were found for reading, however. The greatest pupil growth occurred in classrooms in which there was indirect teaching but high expression of hostility. Soar interprets these data in light of the animal learning laboratory studies which show that simple tasks are learned more rapidly under levels of anxiety that are high enough to inhibit more complex learning. This seems to suggest acquisition of reading skill is less complex than that measured by vocabulary tests.

Another series of research programs which have used observational techniques at an even greater level of sophistocation are those of the ecological researchers, eg. Barker and Wright (1954). Gump (1964) and Kounin (1962) and others have pointed to the coercive force of behavior settings upon behavior. These data have suggested that more detailed observation is essential if data are to be obtained concerning the real life situations of the classroom.

There are a series of other methodological possibilities which have been suggested and occasionally tried out in the research on teacher effectiveness.

Gage (1967) points out that there are already too many different models with no attempt being made to integrate or translate them and suggests focusing on "micro-criteria" of teacher effectiveness. Fortune (1967) also embraces the micro-criteria format and suggests using video tapes as a research strategy. Honigman (1966) used a three dimensional model in regard to classroom influence which included: (a) affective, (b) control, and (c) cognitive variables and felt that he demonstrated this model to be more accurate in predicting teacher effectiveness than the Flanders model. Miller (1965) suggested reviving the Halpin paradigm for further research in this area but admitted that his primary purpose was heuristic. Eisner (1965) started by differentiating definitions of learning as "the desired response," teaching as "the act of systematically presenting stimuli" and instruction as "the total stimulus setting within which systematic stimuli and desired responses occur." He suggested pursuing research on teacher effectiveness along these lines. Hill (1965) perhaps represents another end of the continuum when he holds out for abandoning research on effective teaching since it has been so largely unproductive and just "modeling the master teacher" in training and practice.

Problems

Yamamoto (1963) specifies very succinctly the problems of drawing any conclusions from the literature on teacher effectiveness when he states that most studies are not comparable. This is, indeed, the chief difficulty with the whole area. This lack of comparability may be the result of a lack of basic definitions of terms. Remmers in the Report of the Committee on the Criteria of Teacher Effectiveness in 1952 stated that effectiveness is the degree to which effects are produced. This circularity was later clarified somewhat by Mitzel's three variable concept of process, product and presage criteria. LeFevre (1967) reviewed the whole questions of values and their relation to the structure imposed by researchers on teacher effectiveness. Soar (1964)

discussed the methodological considerations of research in this area and the vast potentialities for virtually all variables to be grossly confounded.

Another interesting tack on problems in this area was taken in debate by Combs and Mitzel (1964). Combs held that good teaching is impossible to measure objectively in that, by definition, it is a function of the uniqueness of the teacher and, therefore, unquantifiable. Mitzel believed, on the other hand, that some progress had already been made regarding quantification of teacher effectiveness variables and that more was in progress. He pointed to the continued refinement of research tools and the systematic study of relationships and urged research which would be tied to behavioral variables.

Conclusions

Several conclusions seem warranted following a consideration of the preceeding research on teacher effectiveness:

1. Research regarding presage variables has yielded at best conflicting and confusing results and it would seem that we are not yet ready for detailed study in regard to these criteria.

2. Clearer guidelines are needed regarding the ultimacy of product criteria.

3. Observational techniques appear to be much more behaviorally oriented and more objective than other methodologies and are believed to be very fruitful for further research.

4. Attempts to integrate, translate and relate meaningfully significant material already available would appear to have high priority on a list of suggested research activities regarding teacher effectiveness.

5. Attempts to deal with teacher effectiveness as an entity are not thought to be profitable lines of inquiry. Rather, a more fruitful tack might be to focus on micro-units of the concept or smaller segments in an effort to objectify and, if possible, quantify one area before proceeding on to a unification of the whole.

These, then, seem to be the directions and trends which are apparent in research on teacher effectiveness. Certainly this is a very crucial area which becomes more so as the frontiers of learning are pushed further back each day and every effort to bring some meaning to characteristics of an effective learning ecology should be encouraged.

REFERENCES

Barker, R. G. and Wright, H. F. Midwest and its children. New York: Row Peterson, 1954.

Beery, J. R. Does professional preparation make a difference? Journal of Teacher Education, 1962, 13, 386-395.

Bible, B. L. et al. Role consensus and teacher effectiveness. Social Forces, 1963, 42, 225-233.

Blake, M. T. Factors influencing teacher success. Dissertation Abstracts, 1966, 27, 978.

Brain, G. Evaluating teacher effectiveness. NEA Journal, 1965, 54, 35-36.

Brownell, S. M. Increasing the competence of culturally deprived pupils by improving teaching and community services. Detroit: Detroit Public Schools, 1961, (preprint).

Combs, A. W. and Mitzel, H. E. Can we measure good teaching objectively? NEA Journal, 1964, 53, 34-36.

Cornell, S. G., Lindvall, C. M. and Saupe, J. L. An exploratory measurement of individualities of schools and classrooms. Urbana: Bureau of Educational Research, University of Illinois, 1952.

Dandes, H. M. Psychological health and teaching effectiveness. Journal of Teacher Education, 1966, 17, 301-306.

deLandsheere, G. La prediction et l'evaluation de l'efficacite des professeurs. Revue Belge de Psychologie, 1963, 104, 93-111.

Domas, S. J. and Tiedeman, D. V. Teacher competence: An annotated bibliography. Journal of Experimental Education, 1950, 19, 101-218.

Dugan, R. R. Personality and the effective teacher. Journal of Teacher Education, 1961, 12, 335-337

Eisner, E. W. Differentiation of instruction, teaching and learning. Education Digest, 1965, 30, 22-24.

Ellena, W. J. (Ed.) Who's a good teacher. Washington: AASA, NEA, National School Boards Association, 1961.

Fortune, J. C. Toward a research strategy to investigate attributes of teacher behaviors. The High School Journal, 1967, 51, 93-98.

Gage, N. L. (Ed.) Handbook of research on teaching. Chicago: Rand McNally, 1963.

Gage, N. L. and Unruh, W. R. Theoretical formulations for research on teaching. Review of Educational Research, 1967, 37, 358-370.

Garman, C. McB. Effective and ineffective behaviors of students teachers of business subjects. Dissertation Abstracts, 1966, 27, 687.

Gump, P. V. Biddle, B. J. and Ellena, W. J. (Eds.). Environmental guidance of the classroom behavioral system. In Contemporary Research on Teacher Effectiveness. New York: Holt, Rinehart and Winston, 1964.

Hall, H. O. Professional preparation and teacher effectiveness. Journal of Teacher Education, 1964, 15, 72-76.

Hall, V. C. Former student evaluation as a criterion for teaching success. Journal of Experimental Education, 1965, 34, 1-19.

Hill, N. J. The key to effective teaching. The Clearing House, 1965, 40, 131-134.

Honigman, F. K. Testing a three dimensional system for analyzing teacher influence. Dissertation Abstracts, 1966, 27, 955-956.

Kleinman, G. S. Assessing teacher effectiveness: The state of the art. Science Education, 1966, 50, 234-238.

Kounin, J. S. Progress report grant M-4221. Managing emotionally disturbed children in the regular class. 1962.

LeFevre, C. Teacher characteristics and careers. Review of Educational Research, 1967, 37, 433-447.

McNeil, J. D. Concomitants of using behavioral objectives in the assessment of teacher effectiveness. The Journal of Experimental Education, 1967, 36, 69-74.

Mead, M. and Metraus, R. Image of the scientist among high school students in Brandwein, et al., A book of methods. New York: Harcourt, Brace, 1958.

Medley, D. M. and Mitzel, H. E. Some behavioral correlates of teacher effectiveness. Journal of Educational Psychology, 1959, 50, 239-246.

Medley, D. Observed teacher classroom behavior and changes in pupil achievement, creativity and anxiety. A symposium presented to the American Psychological Association, Washington, September, 1967.

Meisgeier, C. The identification of successful teachers of mentally or physically handicapped children. Exceptional Children, 1965, 32, 229-239.

Miller, L. K., Wiley, D. S. and McComas, J. D. A suggested research model for the investigation of classroom teacher effectiveness. Journal of Educational Research, 1965, 58, 205-208.

Morman, R. R. et al. High school teaching effectiveness. Journal of Secondary Education, 1965, 40, 270-274.

Morsch, J. E. and Wilder, E. W. Identifying the effective instructor: A review of the quantitative studies, 1900-1952. San Antonio: Air Force Personnel and Training Research Center, 1952.

Ort, V. K. A study of some techniques used for predicting the success of teachers. Journal of Teacher Education, 1964, 15, 67-71.

Redefer, F. L. Teacher effectiveness: Unfinished studies and unanswered questions. National Elementary principal, 1963, 43, 63-67.

Remmers, H. H. et al. Report of the committee on the criteria of teacher effectiveness. Review of Educational Research, 1952, 22, 238-263.

Ryans, D. G. Characteristics of teachers: Their description, comparison and appraisal. Washington: American Council on Education, 1960.

Ryans, D. G. Assessment of teacher behavior and instruction. Review of Educational Research, 1963, 33, 415-441.

Shim, C. A study of the cumulative effect of four teacher characteristics on the achievement of elementary school pupils. Journal of Educational Research, 1965, 59, 33-34.

Soar, R. S. Methodological problems in predicting teacher effectiveness. Journal of Experimental Education, 1964, 32, 287-291.

Soar, R. S. Observed teacher classroom behavior and changes in pupil achievement, creativity and anxiety. A symposium presented to the American Psychological Association, Washington, September, 1967.

Solomon, D. et al. Dimensions of teacher behavior. Journal of Experimental Education, 1964, 33, 23-40.

Sorenson, G. A. et al. Divergent concepts of teacher role: An approach to the measurement of teacher effectiveness. Journal of Educational Psychology, 1963, 54, 287-294.

Sprinthall, N. A. Whiteley, J. M. and Mosher, R. L. A study of teacher effectiveness. Journal of Teacher Education, 1966, 17, 93-106.

Yamamoto, K. Creative thinking and teacher effectiveness: A review. Gifted Child Quarterly, 1963, 7, 66-71.

Yamamoto, K. Evaluating teacher effectiveness: A review of research. Journal of School Psychology, 1964, 2, 60-71.

APPENDIX A

Ecological Studies
Samples From Teacher Specimen Records

The following are excerpts from 30 minute specimen records of teacher behavior. They are of the first minute in the teacher's day. Both of the teachers were functioning as head teachers in the classrooms of intervention projects for five-year-old culturally disadvantaged children. Each teacher had other aides working with them in the classroom. The children had been in school for approximately six months at the time of the observation. The records have been unitized into episodes, which were the ecological units used for the present study.

Mr. Brown

0'00" Mr. Brown enters the room slowly.
He has a box in his hand which says "Singer Company" on it. He brings in the box and places it on a small table in the center of the north wall of the room.

Taking Roll

He goes to his desk.
He looks at the desk as if looking for something but not really expecting to find it.
He picks up a pencil.

Answering Child

A child comes up and asks Mr. Brown a question.
He says, "Hmm?" in an absent-minded manner not looking at the child.
I am not able to tell whether or not he responds further to the child.

Telling children to put coats

He picks up his register.
He walks across the floor to the center of the room.

He says, "All right, everyone put your coats here on the desk," in a bland expressionless command.
He indicates the childrens' desks in the center of the room.
Then he says, "All right, you too," to a child.
He gestures indicating that the child should put his coat on the desk.

Mrs. Hart

0'00" Mrs. Hart goes to the door leading to the outside and opens it.
(This apparently constitutes a signal as children begin disembarking from the school bus and coming into the school.)
She says brightly, to the first youngster as he enters the room, "Hi there, Calvin," smiling as she does so.
Calvin smiles at her and says quietly, "Hi."
He enters the room.

Greeting Children

She says, with interest to the second child as he enters, "Wyatt, how are you this morning? What a nice red hat."
Wyatt smiles and goes on into the room.
Another child enters.
Mrs. Hart says cheerily, "Good morning, Greg."
A little girl is coming slowly toward the door.
Mrs. Hart says in a quiet but friedly manner, "Good morning, Polly
Polly apparently mutters something under her breath, as her lips move, but I cannot hear what she says.
Mrs. Hart smiles at Polly but does not press further conversation.
Polly enters the classroom.
A small Negro boy enters the school.
Mrs. Hart says enthusiastically, "Paul, what a lovely smile you brought today."
A little girl enters the room.
Mrs. Hart looks at her and says, "So did Gwen."

Taking Roll

Patting Child

He pats two children on the head absently as they walk past him.

Helping Child

A girl asks for some help in unbuttoning her coat.
Mr. Brown walks across the room to the desk where the child is standing.
He puts the register down on the desk.
He bends over toward the child.
He unbuttons her coat.
He straightens up again.
The child takes off the coat by herself and she starts toward the coat stack on the cots.

Mr. Brown picks up his register again. He stands watching the door without expression as other children and the aide enter.

Helping Child

Mr. Brown walks across the room and around a desk.
He bends to help a second child take off his coat.
(I do not know who made the first move here.)
Mr. Brown takes the coat from the child.
He walks purposefully across the room putting it on the stack of coats on the cots.

He turns around facing the children in the room.
He, says, "Okay, let's have a seat," in a flat, toneless voice.
The children begin to sit down.

Patting Child

He pats a child on the head again absently as the child walk past him.

He walks slowly to the center of the room still holding his register.
He stands there briefly for a minute and then moves toward the door.
He turns on the light.
He opens the door and goes outside the room.

Greeting Children

A little boy enters.
Mrs. Hart asks in a friendly greetir "George, how are you today?"
A child enters with a doll.
Mrs. Hart says to the child with interest and enthusiasm, "What a nice baby doll she brought today. Hi there, Yvonne."
Another child enters.
Mrs. Hart says in a friendly manner, "Good morning, Emil."
She adds in a teasing voice, "Hey, where's that smile?"
Emil smiles tardily and as if with some effort.
Mrs. Hart says with approval, "There it is," as she smiles back at the boy. Another child enters and Mrs. Hart says gently, "Good morning, Joseph. We're going to have a nice day today, aren't we?"
Joseph looks at Mrs. Hart as he continues on into the classroom, but I do not see that he responds verbally. A little girl enters the room. Mrs. Hart says in a friendly manner, "Faye, how are you?" She says in mock ferocity, "Hey, I didn't see . . .," pausing to look at the child with widened eyes The child smiles at her.
"There's that smile," she says approvingly.
Mrs. Hart returns the smile.
Another boy enters.
Mrs. Hart says brightly, "How are you, Willie?"
Another boy enters and Mrs. Hart says with interest, ". . . ., how are you today?"
Another little boy comes slowly toward the door.
Mrs. Hart smiles as if amused and says, "Who's this?"
The boy quickens his step and smile hesitantly at Mrs. Hart.
Mrs. Hart says warmly, "Hi, Wade."
Another child enters and Mrs. Hart says in a friendly manner, "Good morning, ..."

Greeting Children

Responding to Driver

The driver calls to Mrs. Hart that some child is ill today.
Mrs. Hart says with interest, "Oh, she is? Thanks so much."

1'00" She turns around, coming into the room, closing the door after her.

Taking Roll

He looks behind the door.
I cannot see what he is doing.

After a very short period of time he comes back into the room.
He closes the door.
He walks slowly toward the center of the room.
He holds his register up at a comfortable reading level.
He calls several names.
He glances around the group briefly.
1'00" He says, "Sit down, Gerry, we can get the roll."
He continues calling the roll.