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ATTITUDES, CERTIFICATION, CHANGE AGENTS, CHILD DEVELOPMENT, *COMPENSATORY EDUCATION PROGRAMS,
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TEACHER RESPONSIBILITY, *TEACHER ROLE

THIS SEMINAR ON THE ROLE OF TEACHERS IN INTERVENTION PROGRAMS CONSISTS OF FIVE PAPERS. THE FIRST SERVES AS AN INTRODUCTION AND STRESSES THE NECESSITY OF TEACHERS' ACCEPTANCE OF CHANGE FOR PROGRAM SUCCESS. IN THE SECOND PAPER, SIGEL AND JACKSON EXPAND ON ONE OF SIGEL'S INTRODUCTORY THEMES, THE CENTRAL ROLE OF THE TEACHER IN THE PROCESS OF CHANGE AND HER NEED TO HAVE THE RIGHT ATTITUDES. NEXT, SCHALCK PRESENTS A DETAILED MODEL FOR TEACHER TRAINING PROGRAMS. THE BASIC ASSUMPTION OF THIS MODEL IS THAT PROSPECTIVE TEACHERS SHOULD, BEFORE CERTIFICATION, DEMONSTRATE BOTH THE PROPER ATTITUDE AND THE ABILITY TO CARRY ON THE FUNCTIONS OF A MODERN TEACHER, INCLUDING PARTICIPATING IN INTERVENTION PROJECTS. IN THE FOURTH PAPER, MCDAVID DISCUSSES THE TEACHER AS A SOCIALIZATION AGENT, HELPING THE CHILD TO BE ABLE TO LIVE IN HIS OWN SOCIETY. FINALLY, DR. BELLER REPORTS ON AN EXPERIMENTAL STUDY OF AUTHORITARIAN AND DEMOCRATIC TEACHERS THAT SHOWS THE SIGNIFICANT EFFECT THE TEACHER HAS BOTH ON WHAT THE CHILD LEARNS, AND ON HIS APPROACH TO LEARNING. (DOCUMENT ED 034 088 HAS THE FULL TEXT OF THE PROCEEDINGS OF ALL SIX HEAD START SEMINARS IN THIS SERIES.) (MH)
Proceedings of Head Start Research

Seminar #6:

THE TEACHER IN INTERVENTION PROGRAMS

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THE ROLE OF THE TEACHER IN INTERVENTION PROGRAMS

Irving E. Sigel
The Merrill-Palmer Institute

During the past decade tremendous progress has been made in developing curriculum for all levels of education. No doubt this same trend will continue in the future. The significance of these trends is reflected in continued breakaway from traditional teaching areas and teaching strategies to modern, appropriate and relevant ones to the electronic age. These changes or recommendations for change are coming fast and furiously from many quarters, such as segments of professionals who ten years ago were uninvolved in educational efforts. Child psychologists, social scientists, other youth disciplines among others, are becoming increasingly concerned with education and the educational process and are entering the education arena with great interest. This is particularly reflected in work going on in preschool and elementary education. In addition, discipline specialists are moving into creating new programs. Geographers are constructing curricula for elementary geography, as are historians, mathematicians, anthropologists, etc.* The end result is a burgeoning of curriculum materials and cries for changing of the educational system to incorporate these new curricula.

Many of these curriculum changes are aimed at compensatory programs for disadvantaged children of all ethnic and racial groups on the American educational scene. In order to enable underprivileged children to cope with educational requirements,

*The Social Science Education Consortium, University of Colorado, Boulder, Colorado, under the direction of Dr. Irving Morrissett, represents this type of effort.
curriculum innovations have been brought about. These curriculum innovations make new demands on teachers, requiring them to alter teaching strategies, content, classroom organization, etc.

The demands are intensifying because the training teachers had is obsolete. Teachers need retooling if these new programs are to be utilized effectively. This, in the current educational system, is a major problem facing curriculum builders since the teacher is central to the entire process of curricula innovation and utilization. Our conviction was shared by Dr. Edith Grotberg who felt the issue of sufficient magnitude to warrant arranging this seminar. We appreciate her interest in this problem and are grateful for the opportunity to be here today.

What is the role of the teacher in the establishment and implementation of intervention programs? New curricula are accepted by public and private school systems and the teacher is expected to participate in these programs, sometimes with intensive inservice training and other times with a more casual approach. In either event, the expectation by administrative officials is that the teacher will employ the new programs because they are presumed to be better than the old. The teacher, however, has been trained perhaps, with other conceptual views and with other understandings of materials and educational objectives. Thus, when new curricula are presented and the teachers are asked to participate in their use, what and how should the teacher's role be viewed? Our contention is that the degree to which the teacher is open to and willing to change, is open and willing to participate with commitment to inservice training programs, to that degree will the teacher cooperate and help make the program a success. Otherwise, the program will be handled in a desultory manner with resistance and with serious question as to programmatic use. It is to that end that I saw fit to bring the matter to the attention of the group of educators for discussion and consideration.
The issue of innovation and change in education is certainly not new, nor is it in any way limited to teachers of disadvantaged children. The appropriateness of bringing it to the attention of teachers working in such programs as Head Start or Follow Through rests with the current advances made in curriculum under the auspices of these organizations. Therefore, teachers participating in new programs with disadvantaged children are being subjected to a greater barrage of innovations, and also greater demands for change. This is necessary since most teachers have not had systematic or academic training emphasizing work with these various disadvantaged groups. Further, the demands of both government and segments of the public for resolution of school problems with children of these marginal groups are increasing. Now programs and teachers working with disadvantaged children are subject to greater critical scrutiny than ever before. The situation is critical; the issue really is a broad one of education as a whole, for the whole system is involved in innovations and change. The issues discussed in this conference relative to change for teachers of disadvantaged children are relevant to the general questions of educational innovation. The specific type of change that might occur may differ, but the principles of coping with innovation are generic.

Because of the point of view, the concern with general questions relevant to education, the papers are broad in scope. Application to disadvantaged children becomes obvious. The Sigel and Jackson paper focuses on the role of the teacher in intervention processes, with concern for the teacher's attitudes, feelings, willingness to change. Particular emphasis is placed on the complex role of the teacher as a practitioner, but also as a creative participant in the change process. McDavid describes some of the necessary information and background understanding of child development necessary for the educative enterprise, pointing out clearly and in some detail the kinds of issues, the kinds of knowledge, that become highly germane for the educator. Schalock presents a highly worked out model of teacher education which is relevant to any teacher education
setting. He does not feel that we have moved adequately in previous programs. As will be seen, his model holds that increasing the motivation of teachers, or giving them an opportunity to shape curriculum, or giving them an opportunity to execute the curricula in their own idiosyncratic styles is not enough, and does not guarantee that teachers effect desired learning outcomes for children. Dr. Schalock feels that focusing on attitudes as discussed by Sigel and Jackson is inadequate. He moves beyond that by providing a competence model from which to work. Application of this model, he hypothesizes, will result in the teachers being prepared to accept the ongoing changes in the educational field by acquiring the needed skills and competence to carry out the objectives.

Finally, we come to Dr. Beller's paper, which is an empirical study, demonstrating dramatically the significant role the teacher plays in influencing the child's motivational system and contributing to the child's reward system. By showing the difference in outcome of authoritarian or democratic teacher types, Dr. Beller presents convincing data demonstrating that these behavior patterns, as well as attitudes of teachers, have impact not only on what the child learns, but his approach to learning.

These papers, in their entirety, are aimed at focusing on and elaborating the role of the teacher in the educative process. The degree to which we have elucidated this, to that degree do the papers serve as furthering the cause of progress in education.
The educational enterprise is currently undergoing considerable soul searching, especially in regard to intervention programs with underprivileged minority group children. Concern is, among other matters, for curriculum, teacher preparation, school organization, etc. Intervention programming is really a euphemism for curriculum and teaching innovation for minority group children who are failing to profit from current educational activities.

The thesis to be expounded in this paper is that the success of these intervention programs is ultimately dependent on teachers' acceptance, commitment, and skill in carrying out programs. Re-examination of the teacher's function through logical analysis and subsequent recommendation for definition of teacher role and consequent programmatic actions are considered as the necessary and sufficient requirements for effective long-term planning.

The degree to which the teacher is committed to carry out the substance as well as the spirit of an educational innovation, to that degree can the program be effective. This is our contention. Irrespective of the state of the learner, the elegance of the program, with its accompanying technology, the enthusiasm of principals, superintendents or administrators, the teacher's involvement is the key.

The ultimate control of what goes on in the classroom resides with the teacher. Consequently, if the teacher is an enthusiastic knowledgeable professional with a positive attitude and high morale

1. This paper was presented at a Head Start Research Seminar April 19, 1969, in Washington, D.C. under the auspices of the Office of Economic Opportunity.

2. The authors' address now is at the Department of Psychology, State University of New York at Buffalo, Buffalo, New York, 14214.
toward the new program, to that degree will the program work. If
the teacher is desultory in interest and commitment, if he is un-
convinced of the value of the program, if he does not understand
its conceptualization, if he has not mastered the teaching strat-
egies and necessary skills to implement it, to that degree will
any intervention program, or, in fact, any educational program, be
doomed to fail. It is within this context of the significance of
the teacher role that the arguments of this paper will be developed.

Unfortunately research data to support the propositions herein
cannot be provided since relatively little research has been done
directly germane, to wit, the relationship between teacher involve-
ment and commitment and curriculum success. It is a difficult and
tricky question, of course, to investigate empirically. Much work
has been done, as we know, on teacher attitudes and personality, and
we shall have occasion to mention these later, but our contention
is that it is the interaction between these personality characteris-
tics and curriculum change that relates to effective pupil change.
The attempt in this report will be to derive a hypothetical and
analytic model which could hopefully stimulate analysis of the role
of the teacher vis-a-vis the educational intervention programs,
guide program development, and encourage research.

What is Intervention

The term "intervention" has in recent years become the euphemism
for modification or change or alteration of programs in the service
of minority group children. Actually the term in this sense is made
restrictive since it is in fact a general term, describing all educa-
tional programs, because education by definition is in fact inter-
vention. After all, the word "intervention" refers to intrusion,
or stepping into a stream of ongoing activity. From this vantage
point, all educational efforts are interventions, particularly since
the fundamental task in the educative process is to socialize the de-
veloping child. Thus, intervention is a form of socialization,
basic to educational activity. The school is a significant social-
izing agent because it provides the child with experiences which are
geared to expected socialized outcomes. The school, its physical and social organization, its array of personnel, has as its basic social goal the modification of the behavior, attitudes, skills of children. The teacher is the prime agent, who by his own behavior in various phases, ranging from classroom organization to teaching strategy, attempts to influence the developing child. In this way the teacher introduces the child into a world of problem solving and learning, teaches the child where and when to express impulses, where and when to express ideas, how to go about detecting and solving problems, how to acquire certain bodies of knowledge, and how to express all this, both in behavior and attitude. The outcome, over a long socialization period, is expected to be an educated person oriented in behavior and attitude toward work, toward achievement, toward social living in the modern cultural context. Intervention as viewed in the context of socialization then is an accepted social responsibility of the school. This point of view is relevant irrespective of grade level, public or private school, or minority status of the children.

The model, then, speaks of the school as a socializing agent. This is not to say that other socializing agents do not exist, such as the family, the church, and peers. But the oft stated concern over the quality of public education, the control of schools, the tremendous intensity with which integration and segregation of schools should be carried out, all support the concept that society views the public school as a significant socializing agent. This then is social confirmation for our argument that the school is expected to play a fundamental socialization role along with, and presumably consistent with, the goals of other socialization agents.

The teacher is a key individual, intrinsically involved in this socialization process. He provides, by his own actions, models of behavior, metes out punishments and rewards for appropriate responses in an array of behavior and attitude settings.
ranging from response to academic subjects to ways of greeting strangers. In the final analysis, the teacher becomes a critical concrete expression of the society. By the way, the fact that we talk about the teacher as functioning in *loco parentis* lends further support and validity to the legalization of the concept of the teacher's role. Further, historically the rules and regulations governing the behavior of teachers, the prescription of particular sets of behavior, of morality, loyalty, and devotion to duty, further support the validity that the society places considerable import on the significance of the teacher's socializing functions.

If all education is intervention, and if the teacher is the central figure in implementation, then further analysis of the teacher role requires discussion of the intervention phenomena and particularization of the teacher's role in it.

As was indicated previously, and to recapitulate, the popular use of the term "intervention" is for compensatory type of education where reference is made to changing ongoing educational programs with the expected hope of altering outcomes of pupils' behavior. If this is true, then intervention implies that the educational establishment admits to the failure of the status quo educative enterprise in reaching these marginal ethnic, racial and poverty level groups who comprise large and important segments of the public school population. The failure, then, of the status quo demands the need for change and the major challenge is to decide on how to intervene. Basically then the issue of how to alter the status quo and maximize program opportunities for marginal groups of children. The direct implication, in sum, is that the school's methodology is inadequate for socializing these children and must thereby be re-oriented so that program effectiveness will emerge.

Viewed in this way, intervention requires changing the curriculum. Since the existing programs are judged as ineffective or inappropriate for various types of marginal and impoverished types of population, the change must be toward new and different curricula
which must reflect their appropriateness for modification of the behavior of marginal populations. Intervention as conceptualized in this paper must be in toto. In the current educational enterprise, changing its nature and its content and its practices, as well as its methodology, to become a more effective socializing agent means that every aspect of this totality should be subject to change. Central to the total effort is the teacher, for in the final analysis, it is he who is the direct contact between the program and the consumer, namely the child.

Granting the need for overall change in educational theory and practice, we cannot, in this discussion, take on the whole ball of wax. Therefore, the focus is going to be on the central figure, the teacher.

The significance of the teacher as an agent of change has been duly summarized in this paragraph quoted from an article by Chase:

The existing literature on educational innovation and social change provides little either in the way of empirical data of verifiable hypotheses on how to accelerate the process of making education a more effective instrument either for the realization of social goals or for the development of individual capacities and talents. Without an adequate understanding of the forces influencing change in education or the processes through which the institutions of education interact with culture and society, it is difficult to predict the direction and amount of future change or to specify the factors which are likely to determine changes in the future. Consequently, attempts to intervene in educational change processes are likely to be inept and ineffective.

Too often the implicit assumption seems to be that adoption of a new form of organization, technique of instruction, or way of grouping learners is in itself an indication of progress and, therefore, to be applauded. Yet, an examination of the changes in educational practice which have occurred over the past fifty years would lead to considerable doubt about the educational significance of many of them. Professional and popular books, periodicals, newspapers, and telecasts create the impression of sweeping changes over the past several years in the content and method of instruction, in school buildings and facilities, and in ways of grouping
learners and using teachers. The new mathematics, the new science programs, the new emphasis on the teaching of foreign languages, the use of television and programmed instruction, nongrading and continuous progress, and team-teaching are all much in the educational news. Yet, careful observers, including several of the authors of this yearbook, report that many classrooms are little affected by the new ideas and that the exciting developments which are taking place are attributed generally to teachers of unusual intelligence, resourcefulness, and sensitivity to needs of learners (Chase, 1966, p. 281).

The conclusion that Chase comes to is consonant with the proposition of this paper to the effect that the excitement in the field of education will only effect classrooms to the degree to which teachers are committed. Rather, however, than assume that only teachers "of unusual intelligence, resourcefulness, sensitivity to the needs of the learner, can be committed," as Chase purports, we prefer to take a more optimistic view, to wit, that proper and appropriate teacher training and programming, both preservice and inservice, can create the kinds of attitudes and orientations that are necessary for the diffusion of educational innovations. It is through such activities that we can come to grips with the educational crises we are currently facing.

**Definition of Teacher Roles**

Defining the teacher's role is certainly not a new activity. Much has been written on this very question. For the discussion in this paper, it is necessary to consider the teacher's role specifically as relevant to intervention programming. Consequently we define three essential role dimensions: planning, practicing, and evaluating.

The planning role of the teacher refers to his involvement in the developing of, and/or the modification of programs.* At the earliest practical moment teachers should be involved in and committed as significant participants in the planning phase of curriculum innovation or change. Too frequently the classroom teacher

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* For the sake of convenience, in this paper, the words "program" and "curriculum" are used interchangeably. Both refer essentially to the educational array of activities that are engaged in. This can include subject matter, extracurricular activities, and the like.
is not invited to be an active participant in planning, but rather is subordinate to curriculum supervisors or other types of program developers. The teacher's professional know-how and personal experience, as well as the fact that these programs will be carried out by him, are sufficient for advocating teacher equal participation in planning phases. Involving teachers in this initial phase has the potential for twofold positive outcomes, one informative, enabling the teacher to understand in detail the program logic and content; and second, psychological, creating an involvement and identification as a program builder. The professional hierarchy has to undo the teacher's conviction that he is professionally inferior with respect to program development. When the teacher is appropriately and respectfully integrated in planning groups, the teacher's feelings of competence in himself should be enhanced, aside from the economy of utilization of his experience and skills. To be sure, not all teachers are equally competent or skilled, or even interested, but this does not deprecate the necessity for teacher involvement. Teachers must be included in program planning activities so that the teacher can perceive himself as integral to the innovative phase of program development.* Thus the teacher must be involved in various decision making efforts in the initial planning phase.

The practitioner function of the teacher is self-explanatory. Teachers form the basic administrators of any program. How they practice, what they practice, their understanding of their practices, and the awareness of one's competence in carrying out various activities, are all subsumed under the heading of teacher capability. This is the traditional role of the teacher, and little need be said at this point.

* Of course, not every teacher in every building can be included in all the programming. The formal committee structure that may be used, or the study groups that are set up, and the reporting systems to these groups, should be organized in such a way to give teachers the feeling that they can communicate to the planning group, that their points of view make sense, and that their opinions have opportunity of being incorporated. In other words, the mechanisms by which this larger group see themselves as involved and committed must be worked out to maximize the perception of involvement.
The teacher as an evaluator is a significant role that is too often underemphasized. This is a twofold function where the teacher behaves as follows: (1) as an evaluator of the performance of the children. This is the traditional teacher performance where the teacher uses a wide array of assessment procedures to evaluate the child. This type of assessment refers to the child's responses to the program; and (2) as evaluator of the program itself as reflected in the child's acquisition of particular skills, knowledge, attitudes and behaviors expressly related to the program goals. In this second phase, the child is the dependent variable and the program is the independent variable, in contrast to the first aspect of this bifurcation where the child is the independent variable and the program the dependent variable. Somewhat complicating this evaluation issue is the fact that the teacher is also a participant in this process. The teacher is the crucial connecting link between the program and the child. The teacher's competence is now involved, where effectiveness of the program is related to the teacher's ability to teach the program.

In effect, there is a threefold interaction; the program, the children, and the teacher, all three elements embedded in a group experience. It is in this latter phase that the teacher should function as a participant observer. We contend that it is in the total classroom experience that teachers have too little training and experience in serving as participant observers, or, in effect, studying the classroom environment. This function of the teachers is viewed not only as a describer of events, but also as an event analyst, where the teacher provides some explanation and insight into what is going on. Since such functions are new for most teachers, appropriate pre- and inservice training is necessary, thereby contributing mightily to the quality of such participant observation by the teacher. Valuable data would be obtained detailing the processes and rationale for various events occurring in the classroom situation.

Finally, the teacher should and could play the unique role
of accepting himself as a research subject in evaluation studies. If we accept the proposition that the teacher is the central figure in influencing the effectiveness of any intervention program, then it becomes important for the teacher's attitudes and behaviors to be incorporated in any research program investigating program outcomes and modification of child behavior. The only way this can occur is for the teacher to accept this role of participant in this evaluation endeavor. This calls for the teacher being able and willing to subject himself to assessment, which in the last analysis reflects on his competence as a teacher and a person. Since one class of variables determine the effectiveness of a program resides in the personal and professional domain of the teacher, then it becomes necessary to show teachers why this role of being an informant is important. Techniques, of course, have to be established to support the significance of the teacher's efforts here and appropriate concern and consideration for his acceptance as well as resistance must be considered and worked through.

Functioning as a planner, as a practitioner, and as a participant in the evaluation process is a formidable task, requiring considerable giving of self and psychological strength to put all the roles in perspective. Further, the nonteaching personnel involved must show sensitivity, understanding, and above all, the maturity to assess the role of the teacher. These same factors no doubt are involved in accepting the role of the teacher.

From our perspective, these are the realities involved in the teacher's role in intervention programs. Drawing attention to the complexity is intended as furthering the logical analysis with which the ultimate goal, namely the enhancing of the effectiveness of programs in the context where teachers, children, and the public, is satisfied.

The Teacher as a Change Agent and a Change Agent Subject

The previous discussion emphasized the teacher's role as a
planner, as a practitioner, and as a participant in the evaluation process. These role prescriptions have been clearly defined, where the planner is involved in making decisions about inputs in curriculum; the practitioner is involved in carrying out these inputs and devising the necessary strategies to do so; and the evaluator functions as a participant observer as well as an evaluator of the program and the children—requiring thereby establishing measures for assessment. All these, complex as they are, do define role behaviors for teachers which have definitive tasks to each particular role as attribution.

Underpinning these behaviors is the teacher's feeling and attitudes about each of these role prescriptions. Teachers will vary in their acceptance of these definitions in part or in whole. Teachers may resist participating as planners, or may resist participating as evaluators. They may resist the acceptance of innovative procedures in practice. It must be said, however, in defense of the system, that these role prescriptions are not defined solely by the task itself, i.e., the adult with a group of children in a classroom. Rather it is to say, that given the classroom type setting and the demands made upon the classroom, the role definition described above seems intrinsic to the setting. Acceptance of these as valid descriptions of the generic teacher function enhances the development of a model and subsequent relevant strategies to implement this model, thereby effecting teacher effectiveness. Acceptance of such a model, however, cannot be by dictum, but rather must be by a change in teacher attitudes toward teacher roles and the significance of making one's self ready for change.

The attitude of the teachers toward these roles is a significant factor in influencing the furtherance of educational innovation. If the teacher accepts these role prescriptions and functions accordingly, then he is brought into the change effort. If, however, the teacher is resistant, then the task becomes a formidable one of enabling the teacher to become an open and flexible person, amenable to alternate views of the educational enterprise and willingness to participate in those activities designed to understand that the teacher role is many-pronged.
Explicitly, what we are contending is that for effective teaching to occur, it is necessary for teachers to be oriented to change. If teachers are not oriented to change, then opportunities for progress and for improvements obviously are impeded if not prevented. In effect, then, the teacher's attitudes must be worked with to orient teachers to assimilate and accept the inevitability of change in educational programs, teaching strategies, teaching objectives, and even in our understanding of the nature and quality of the children. These requirements are relevant since new knowledge is consistently being obtained about all facets of the entire educational process. As new knowledge is obtained within particular fields of instruction, as new technology emerges by which these instructions can be enhanced, as we begin to discover more about the conditions of and principles of learning, then it becomes a necessary and sufficient condition for effective teaching to have the practitioners willing and capable to assimilate the new knowledge and accommodate their own points of view accordingly. This means that teachers must be oriented as professional people to the basic premise that the educational enterprise, as now defined, is tentative and relative to the amount of knowledge we now have. With the increased knowledge acquisition, changes will have to occur. Teachers have to learn to accept uncertainty, therefore, and operate within a relativistic system. This is a very difficult task for people to accept. Yet for progress to occur, it seems that it is a psychological fact that change can only occur when people are ready and willing to change.

What we mean, in effect, is that the teacher must view himself as ready for change and by such readiness, the teacher enhances his own function as a change agent. The posture we are advocating is that the teacher must become an open system, receptive to change, capable of assimilating new ways and thereby becoming an effective change agent influencing the educational system. It is by such an attitude that the teacher enhances his functioning in all of the three role prescriptions described above.
For the sake of clarity, perhaps we should reiterate that our concept of change agent refers to the role of the individual, as well as his perception of self as an actor, to alter the status quo. As an agent the teacher begins to behave in ways to effect this change. As a change system, then, we mean that the teacher should see himself as capable and willing to alter in relation to new information. Thus, for the teacher to perceive himself as a change agent, ready to improve that which exists, he must be ready to discard the old to take the risk to try the new, as well as to re-orient himself to take new looks at the old and the new. Such an undertaking and a willingness to take risks is related to personality characteristics. The danger is that some individuals are so psychologically constituted that the task is so anxiety provoking as to immobilize them. Thus care and sensitivity are essential in working with preservice or inservice teachers in this regard. There are ethical issues which must be considered, such as the degree to which modification of personality is relevant or germane, what options teachers have for resisting certain degrees of change and asserting resistance, etc. It must be made patently clear that sensitivity and cautiousness to the feelings of the teachers should not be used in the service of foot-dragging or reluctance to change. The task actually is to define criteria by which the teacher as a change agent must be open, and what is meant by openness. Viewing the sector of the teacher's personality as that which contains variables relevant to the teaching process, it is somewhat easier to define the domain which is relevant and appropriate for discussion when the goal is to increase the teacher's openness to be a flexible person.

The teacher's willingness to accept his own function as that of a change agent is really to perceive himself as an intervention agent. For is that not what intervention is all about. In essence, to function professionally as an effective and up-to-date agent of change calls for a willingness to change too. What, in effect, we are proposing here is that the teacher perceives himself as a perpetual student, and thereby takes the student's attitude, one of
problem solving orientation toward analysis, toward acquisition of new knowledge, and utilizing it.

Consequently, it is important that teachers, particularly in preservice periods, be made aware of the need for perceiving of self as a change agent, while at the same time working toward becoming an open, flexible person.

Some Considerations of the Relevance for Attitude Toward Change

We have defined the teacher's role as a planner, practitioner, and evaluator--each of these functioning in the service of curriculum change. In effect, the teacher may serve as a change agent.

Taba, in her excellent volume on curriculum development (Taba, 1962) describes the strategy that is necessary for curriculum change. For her, curriculum change "means in a way to change an institution. Changing an institution involves changing both goals and means" (p. 455). Taba proceeds to say that "changing the curriculum also involves changing individuals" which

...involves two types of changes. One is the change in the way he is oriented to the world around him, what he perceives and apprehends--the cognitive aspects. The other is the change in his emotional orientation--what he feels to be important, what he is motivated to do, and what emotional investment he makes in his goals. The change is effective to the extent that the two become integrated. At times the two are compartmentalized. Teachers may be exhorted and inspired to change without provision of means for change, as in the case with inspirational talks at teacher institutes. Or they may be led to new perceptions and ideas without involving their will to do anything about it (Coffey & Goldner, 1967, pp. 72-73).

An effective strategy of curriculum change, therefore, must proceed on a double agenda, working simultaneously to change ideas about curricula and to change human dynamics (Taba, 1962, p. 455).

Taba provides six steps in the strategy of curriculum change:

(1) Curriculum change requires a systematic sequence of work involving such issues as initiation of change, order of change,

(2) The strategy for change must include an environment conducive for work,
(3) Effective curriculum change involves a large amount of training—"most curriculum decisions, no matter what their scope, require application of theoretical principles, what balance of theoretical insight and practical knowhow is needed?..." (p. 455-456),

(4) A significant dimension are the human and emotional factors for Taba holds that "to change thinking about curriculum one also needs to change people's attitudes toward what is significant and perceptions about roles, purposes, and motivation. To effect change means to destroy dependencies on previous habits and techniques of work, with whatever personal meanings these have" (p. 456),

(5) Many competencies are necessary and these skills must be organized so that there are clear definitions of role of administration, curriculum specialists and others. Who and how different specialists participate needs be decided since not everyone has to participate in all phases,

(6) Competent leadership is required for effective curriculum change. Skilled leaders have to guide the change process through the complex steps required.

The planning for change requires consideration of these points. Taba does elaborate each of the above points, and the interested reader is referred to that magnificent discussion.

Suffice it for our purposes to point out that these complex processes are necessary to effect success of intervention programs.

Relevant as all these issues are, the one that is of paramount importance for the teacher is for him to accept the role of a change agent. "To effect changes means to destroy dependencies on previous habits and techniques of work, with whatever personal meanings these have" (Taba, p. 456).

The attitude of the teacher toward program change for intervention comes to the fore as a salient variable. The teacher has to accept the need for the change as well as the kind of intervention program. A further complication in this discussion is that the change in program is intended for minority group children.
Attitudes and beliefs of the teacher toward this population in terms of their learning potential, intelligence, and personal habits are all ingredients that influence the receptivity of teachers to change. In essence, the teacher must be willing to change his practices and program in order to serve minority groups more effectively. How readily can resentment then be aroused? Why, the teacher might ask, must I change all that I have learned because of these disadvantaged children? Herein rests the great challenge for the teachers—to accept changes in the program and simultaneously to accept the capability of the pupils to profit from this new endeavor.

The curriculum revision in intervention programs is necessitated by failure of existing programs, and teachers may resent the children who are the apparent cause of these new endeavors. For some teachers there is excitement in the new and the challenging, while for others, there is no such challenge. It is to this latter group that our remarks are addressed.

Attitudes of teachers will play an important role in their accepting change. These attitudes will fall in three major areas: (1) the attitude toward self as a change agent; (2) attitude toward leadership defining the need for change; (3) attitude toward the "cause" of change—the "disadvantaged" child.

Attitude toward Self as a Change Agent:

Does the teacher define his role as a program change agent or does he relegate this responsibility to administrators, curriculum supervisors, etc.? Does the teacher perceive himself as a passive recipient of innovations; this is not a change agent role. It seems, however, that if our basic proposition is correct, that the teacher must understand the theory and strategy of a particular curriculum, then teachers can and must be active participants in the change process. This is necessary even if it means altering one's own role perception.

Thus, the teacher's attitude and definition of his role must be enlarged to include the change agent function.
Attitude toward Leadership:

Initiative in curriculum change can commence at any number of levels, probably depending on the structure of the system. If change is to be a grass roots movement, wide participation will probably be needed requiring an array of leadership roles. A good illustration of the leadership role is described by Taba, pp. 482-490. This is an area too complex to spell out in this paper. Suffice it to point out, however, that for intervention programs to become part of the repertoire of a teacher's competency, the teacher must involve himself in the change-program. We believe that the attitude toward the leader or leaders in these programs as well as the willingness to accept leadership functions are critical factors influencing acceptance of the program.

Attitude toward the "Cause" of Intervention:

Teachers may believe that the "source" or "cause" of the intervention programs is the underprivileged child. His lack of motivation and task orientation, his unwillingness to participate in the learning endeavor can be viewed as the "cause" of much of the educational uproar—especially in urban areas. Resentment toward the child, his family and his group may well emerge—creating negative or defeatist attitudes toward the entire enterprise. The issue is more than academic. There are those who indite the entire educational system, not only economic and racial minority children; others argue the system is doing pretty well—the problem is lack of progress in "how to change the disadvantaged pupil into a more effective learner. When we find out how to change the pupils,...we will be quick to make the necessary institutional change" (Havighurst, 1969, p. 11).

Much heated controversy exists in this area, namely the degree to which the marginal ethnic or racial minority child and his family are the source of the difficulty. If only they would learn how to participate in the status quo, then all would be well.

The fallacy to this argument is that the educational institution at all levels for all children is in need of overhaul—note the
recent disaffection of Black parents in New York City and a growing interest in community control.

If teachers, however, have racial or ethnic prejudice, however well rationalized, to that degree will they be resistant to change and resentful of the time and energy and money involved in such efforts.

It is incumbent on any group involved in intervention programming to identify and attack this problem directly. There are indeed many subtle ways that racism can be expressed; consequently it is necessary to have leaders and group members sensitized to this issue.

The difficulty is that we are living in a very difficult period in terms of social change--race relations, intergroup relations, etc. The confusion is not limited to the layman or the unintiated--note the recent controversy set off by the publication of the article on Negro intelligence by Arthur Jensen (1969). Eminent scholars rebutted him. The issue--the intelligence of the blacks. No, the issue of racial equality, social or intellectual, is by no means dead. It is better dispersed, less blatantly avowed, and, in many sectors of our society, becoming an issue of increasing resentment.

Teachers reflect community perspective and offer community attitudes. How deeply rooted may be their feelings toward the disadvantaged children and their families, to that degree will their behaviors be influenced.

Racial prejudice is not dead. Teachers have as their obligation a professional concern here--they must not harbor feelings and attitudes and beliefs which compromise their function as teachers. Consequently, assessment and clarification of feelings toward these minority group children as "causing" educational crises in our cities is needed. Perspective is needed, to wit, our educational system has for too long neglected to do anything about large masses of its populations--now we are paying the price of that neglect.
Institutions and systems of education as well as children and families will have to change, thereby benefiting all segments of the social order.

Concluding Comments

Attitudes can be changed. There is a body of social psychological literature devoted to this. Further, research in group dynamics has also revealed techniques and procedures for accomplishing these modifications.

This paper is not a manual for such achievements. Rather our purpose was to define from our own perspective the role of the teacher in intervention programs. Our conviction is that his role is central, that recognition of this is necessary, and that proper steps at preservice and inservice levels are vital. These steps include helping teachers clarify their own roles and attitudes so that they can be more effective participants in the process of educational change. Without such involvement and commitment, coupled with a grass-roots movement for change, intervention programs will be in difficulty. Appropriate programs that are accepted by the teachers and implemented skillfully should result in enabling disadvantaged children to participate fully in the new educational system--one that honestly seeks to meet their social and psychological needs.
References


The purpose of the present paper is to outline a model of a teacher education program that is designed to insure that teachers are able to make such mixes and therefore are able to bring about the desired outcomes in pupils within the educational contexts within which they teach. As initially developed the model focuses on the preparation of early childhood and elementary teachers at the preservice level, but the model is sufficiently generic that it can be adapted to the preparation of all teachers at either the preservice or inservice level.

The ComField (competency based, field centered) model teacher education program is one that has evolved from the work of a consortium of institutions and agencies in the northwest region of the United States in response to an invitation by the U.S. Office of Education. The model derives from the primary assumption that prospective teachers should be able to demonstrate prior to certification the functions that they are expected to be able to perform after certification, e.g., bringing about given learning outcomes with children or bringing about specified parental involvements in programs. As such a model based program requires

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1The initial model development effort is reported in Schalock, H.D. and Hale, J.R. (Eds.) A Competency Based, Field Centered Systems Approach to Elementary Teacher Education. Vols. I, II & III: Final Report for Project No. 89022, Bureau of Research, Office of Education, U.S. Dept. of Health, Education, and Welfare, 1968. Additional work has been done on the model by a consortium of colleges and schools in Oregon, and this work has been incorporated within the present description of the model.
a) that the functions to be performed by teachers in given settings be specified; b) that the behaviors or products of behavior that are acceptable as evidence of the ability of prospective teachers to perform those functions be specified; and c) that the teacher education program in fact leads to the ability of prospective teachers to perform the functions specified in (a) as measured by the indicators specified in (b).

Four additional assumptions underlie the model:

1) that prospective teachers should be able to demonstrate prior to certification that they are independent, self-directed learners and that they can adapt to new situations that demand new patterns of behavior;

2) that a teacher education program must be relevant personally to those going through it; that is, it must accommodate individual differences in learning rates, styles, objectives, etc.;

3) that a teacher education program must be responsive to the needs of a pluralistic society by preparing prospective teachers to function within a wide range of social contexts; and

4) that if a teacher education program is to be genuinely responsive to the needs of a pluralistic society, that is, if it is to prepare teachers to be able to function within a broad range of local educational programs, it must provide for community participation in its own definition and operation.

Finally, the model rests upon a commitment to the methodology of systems design. Generally speaking, the application of systems design principles means that each of the functional parts within the model, as well as the model as a whole, assumes three characteristics: a) it is designed to bring about a specified and measurable outcome; b) it is designed so that evidence as to the effectiveness with which it brings about its intended outcome is continuously available; and c) it
is designed to be adaptive or corrective in light of that evidence. This is the case whether the part in question is a segment of instruction within the program, a segment of the procedure developed to personalize the program, or the personalization procedure as a whole. As such the model represents a process or way of proceeding. It is "goal oriented," characterized by "corrective feedback loops," etc. In short, it is a process that requires its user to know what it is that he wants to accomplish; order events in such a way that he has some probability of accomplishing it, assess whether the specified events do in fact accomplish that which they are intended to accomplish, and if they do not, modify them until they do. This process is represented schematically in Figure 1.

Given its defining characteristics ComField can best be described as a model of an elementary teacher education program that is systematically designed, personalized, competency based, and field centered. The basic concepts involved in and the operations dictated by the model are summarized in the paragraphs which follow.

**THE DEVELOPMENT OF PROGRAM OBJECTIVES**

As indicated the goal of the ComField model is to prepare teachers to be able to perform the various functions required of them in the elementary schools of the 1970's and 80's. Three steps need to be taken to translate this general goal statement into operational program objectives:
1) specify what elementary education will be like in the 1970's and 80's;
2) specify the functions to be performed within such an educational context, for example, managing instruction, contributing to instructional systems development and evaluation, conferencing with parents, etc.; and
3) specify the tasks to be performed within each function in order to carry it out. As used in the ComField model tasks that teachers are to perform are defined in terms of the outcomes to be realized in the school setting, that is, the outcomes to be achieved through instruction, evaluation, conferencing with parents, etc.

Such a conception of teaching tasks represents a major departure from most analyses of objectives that accompany teacher education programs, and is critical to the operation of the ComField model. By taking the point of view that the tasks to be performed by teachers are equivalent to the outcomes to be realized within the school setting, in contrast to actions to be pursued or roles to be filled, the designer of a teacher education program is forced to specify the objectives of the educational enterprise at the elementary school level as a basis for the development of his teacher education program. This includes the classes of pupil outcomes that are to derive from the educational program, the outcomes to be achieved through working with parents, the outcomes to be achieved through working with peers in curriculum development and evaluation, etc. It represents, therefore, an extremely rigorous requirement in program development, but, in the view of the developers of the ComField model, a necessary one if the major assumption on which the model program rests is to be met with candor. It is a necessary assumption also if education and teacher education are ever to move away from the position that the performance of certain classes of activity on the part of teachers, for example,
asking questions, administering tests, giving information through exposition, and guiding reading in a workbook, are sufficient in and of themselves to bring about learning in children or are sufficient in and of themselves as evidence of a prospective teacher's ability to bring about learning in children.

One of the major consequences of considering tasks to be performed by teachers in terms of outcomes to be achieved in the schools is the burden of responsibility it places upon those in the teacher education program to develop reasonable and valid task specifications. This is particularly critical with respect to the classes of pupil outcomes that are to derive from an elementary education program, for the welfare of children, the community and nation are at stake. Because of the criticalness of the issue, the ComField model specifies that a mechanism (an educational objectives commission?) be established at the state level, with strong representation from local communities, schools and colleges, to work toward the development of a taxonomy of outcomes appropriate to the function of elementary education in the 1970's and 80's. In addition the model specifies that all decisions as to such outcomes must be reflected against (a) what is known about human development and behavior, (b) what is known about the present social and cultural context, and (c) what is known about the nature of alternative future social and cultural contexts. The basic assumption underlying the development of such a mechanism is that by hitting the issue head on, by doing so with broad representation within a state or a region, and by reflecting the deliberations of such a group against that which is known in the social, behavioral and biological sciences, the best possible set of objectives will be derived and they will have the best possible chance of being accepted by parents, local school districts, departments of education, etc. While such a taxonomy would of necessity be subject to continuous change, both as a consequence of changing demands of the social system and changing knowledge of human development and behavior, it represents a place to begin. Without such a beginning a ComField based teacher education program cannot function.
THE DEVELOPMENT OF THE MEANS TO ASSESS THE REALIZATION OF PROGRAM OBJECTIVES

If a teacher education program is to be taken seriously in its claim to obtain evidence as to the ability of prospective teachers to perform the tasks prior to certification that they will need to perform subsequent to it, the program must become serious in its effort to obtain such evidence.
Figure 1. A schematic representation of the adaptive process reflected throughout the ComField model.
Figure 2. A schematic diagram of the ComField Management System
While most speakers on a panel of this sort are inclined to discuss research that has already been completed, I find myself concerned primarily with research that has not as yet been done! In considering the questions related to the role of the teacher in educational intervention that most excite my own interest, I discover a scarcity of pertinent examples. Jerome Bruner has defined education as "assisted growth," and I presume from this that an effective teacher ought to know how to assist a child's growth processes. I presume further that educational and developmental research are obligated to provide the know-how for more effective teaching. Yet the lack of research pertinent to many questions about the teacher's role suggests that perhaps the blind are leading the blind. I will be slightly more optimistic, however, and suggest that there are at least some suggestive leads in current research. In other words, perhaps the one-eyed are leading the blind, and in the world of the blind, the one-eyed is King. I trust that with some stimulation, new lines of research will unfold more rapidly to illuminate our planning of educational practice.

I am concerned with the important role of the teacher as an agent of socialization. The term socialization refers to the sequence of social learning experiences that result in the integration of an individual into his societal context. In social psychology, socialization would be considered to include, for example, the introduction of a child to a new group of playmates when he enters a new school, or the entry of a new committee member into a group that has already begun its work. But socialization also applies to the long complex process of social learning through which an infant, during his progression towards adulthood, is assimilated into the
society of which he is a part. Thus a major proportion of the child-rearing and educational processes involves socialization, and the exploration of this area represents a point of intersection between social psychology and developmental psychology.

Socialization is an active process within any organized society. It is a society's mechanism for sustaining and perpetuating itself, for inducing new members of the society to build continuously from the former to the future. Socialization practices include the provision of models or examples to be identified with, copied, and emulated; they include the presentation of standard learning or adjustment situations as problems to be solved or coped with, such as social conventions governing independence, sexuality, aggression, achievement, and the like. They include the direct management of rewards (for "good" or accepted or socially desirable behavior) and punishments (for "bad" or unaccepted or taboo behaviors). In sum, socialization practices are simply social and interpersonal devices for controlling the behavior of an individual, and for shaping it to the mold of sociocultural specifications. These specifications are more or less uniform within a homogeneous society. Anthropologically oriented investigators may be able to characterize in general categorical terms the socialization practices of the Kwoma in New Guinea, the Kwakiutl Indian, the Puerto Rican slum dweller, and the Boston middle-class. Or within our complex society, sociologically-oriented investigators may be particularly interested in differentiating the socialization practices of the white rural midwesterner, the urban Negro, the American Indian, the Protestant professional middle class, the Roman Catholic semi-skilled laboring class, and/or any other combination of racial, ethnic, linguistic, demographic, or other descriptive subcategories one might assemble. The point is that wherever there is a homogeneously bounded society or culture, one may also expect a bounded and defined set of corresponding socialization practices.
These coherent sets of socialization practices are ordinarily implemented by a few specific agents within a society: hence our term agents of socialization. Certain designated individuals, or sets of individuals, or agencies, are delegated major responsibility for carrying out the socialization process. In our society, and in most, the primary family (and especially parents, obviously) comprise the most critical agency of primary socialization. Later in the developmental process, other adult authority figures, peers and agemates both as individuals and in organized groups, and formalized institutions such as religious and ethical systems, contribute further to the socialization process.

This brings us back to the focus of our interest here: on the teacher as such an agent of socialization. In our society, apart from the role of the primary family, the educational establishment and its representatives are probably the most significant secondary socializing influence upon the child. After the first five years, the child spends almost half his waking hours under the direct influence of the school until he is virtually an adult. Moreover, public education (the so-called "educational establishment") is highly formalized and institutionalized in our society. We have one rather uniform set of ideals and standards which define educational practice for us, and yet we deal with a varied and heterogeneous set of consumers. The primary socialization processes within the families of white middle-class children and those within low-income Negro, or rural migrant, or Indian families are extremely divergent. Yet we plan public education along one set of blueprints, offering the same kind of secondary socialization to all regardless of their other exposures to socialization. But let me return later to that question, because both sides can be argued in this controversy of homogeneity versus diversity.

Despite my wordiness in reaching the point, I have one primary point of criticism to make as a point of departure for my remarks here: I wish to criticize our tendency in educational research to view the role of the teacher as merely that of
intellectual coach or trainer, a steward in custody of the child's intellectual-cognitive talents and skills. Traditionally, we restrict our conception of the teacher to this narrowly defined role. We analyze the manner of her management and utilization of materials and resources related to the child's accumulation of verbal, mathematical, logical, and information-processing skills. We limit our investigation of curricular content and structure in terms of these functions. And sad to say, when we set out to build better mousetraps, we design new and better curricular models within the same circumscribed conception.

I propose, then, that as researchers, we make some concentrated effort to broaden our conception of the teacher's role, and to begin to investigate and describe both curriculum and teacher function in terms of the teacher's role as an agent of socialization, carrying out all of the functions associated with the socialization process. Instead of merely mouthing this cliche when we seek to convince the taxpayer of the comprehensive importance and all pervasive influence of public education on all facets of his child's life... let us begin to scrutinize the educational process accordingly. The literature of developmental and social psychology is rich with investigations of the socialization process in our own and other societies. But unfortunately, this literature has brought very little to bear on educational research and planning. In the balance of the time and space permitted here, I propose to offer a few suggestions and illustrations for what I see as particularly fertile and productive lines of research to be followed. But I don't know whether to talk about teaching children or teaching teachers!! Or maybe I would say the same thing in either case.

First let me consider briefly a more-or-less "ethical" issue. In years past, there was a kind of unwritten code within public education that there were certain sacred and inviolable boundaries of the spheres of influence of the school and of the family. The arena for the teacher's function was
regarded to be the classroom, and her sphere of permissible influence was presumed to end somewhere shortly beyond the four walls of her classroom. There were domains reserved to the privacy and sanctity of the family as primary socializing agent: values and most attitudes were traditionally regarded as inviolably sacred to the home and family—especially those concerning sex, religion, politics, and a few other particularly delicate areas. Traditionally, the American family shared this unwritten code, and the PTA notwithstanding as a vehicle for desegregation of parents and teachers, American families resisted the overlapping socialization influence of the public school. To some extent, this code has begun to break down, especially as the family has in some measure abdicated its role as socialization agent in later years of child development. Gradually, schools have expanded their concept of legitimate socialization functions, and families have broadened their expectation of the school as a socializing agency. There are still those who argue that properly the role of socialization in the school ought to be circumscribed and gerrymandered out of certain spheres of behavior. Nonsense! Is it possible to swim across a river without getting wet? Is it possible, indeed, to educate a child cognitively-intellectually without touching upon and dealing with his feelings, his goals, his motivational and attitudinal structures? Human beings are simply not made to be segmented in the educational process.

There is a second quasi "ethical" issue to be considered. Our society is a diverse and heterogeneous one, in which we embrace a variety of subcultures delineated by ethnic, linguistic, racial, geographic, educational, and socioeconomic earmarks. Within each of these subcultures, social standards vary, and corresponding socialization practices vary. Yet we plan public education as a single, massive, uniform Procrustean institutionalized system of values, beliefs, and habits defined according to some stereotype rising magically out of the middle-class pillars of society. Ordinarily, the stereotype looks like a blue-eyed, blond, Protestant, with clean fingernails, carefully cut and combed hair, a modest but secure savings account at the bank, a
firm conviction that hard work in this life will earn blessings in the next to come, and a burning desire to earn good grades at school, the respect and acceptance of friends, a lot of money (and appropriate symbols thereof) in the middle years, and a secure, quiet retirement in the Caribbean in old age. He speaks Ohio-midwestern English (because the only people really worth communicating with speak that way). These days, he wants to be an Engineer, if he is a male, and is consequent-ly fairly comfortable about being bright in math and the natural sciences, but a little embarrassed to be too knowledge-able about the arts. Of if she is female she wants to be a housewife with a modicum of domestic skill, sufficient intellect and skill to support herself if necessary, but in the meantime to be a good cocktail party conversationalist, and have ample glamour to excite her husband, and if need be, occasional others. This, then, is the stereotypical target toward which our institutionalized educational system tends to socialize all of its participants, regardless of the adult subculture to which they are bound, and regardless of the relevancy or irrelevancy of these values and habits to each one's own real world. Now let me clarify the point I'm making: I wish neither to condemn nor endorse this stereotype as a practical target for institutionalized socialization. I merely want to demand that it be given some analytic attention. First, I would suggest that we need not resolve the issue with a simple Yes or No. We need to tease apart the various elements of middle-class socialization and determine which values, beliefs, or habits are universally serviceable ones, as opposed to others which are trivial and superficial. For example, speak-ing midwestern English may be no more serviceable than speak-ing the Gullah Negro dialect of South Carolina, under certain specific conditions of reality within a subculture. Good strategy may simply advise speaking Spanish when in Madrid, and English when in Cleveland, if one's purpose and goals lie in Madrid or in Cleveland. On the other hand, certain elements of achievement motivation, such as perseverance and curiosity,
may be almost universally serviceable regardless of one's goals or purposes. Personal hygiene and cleanliness may be serviceable purely from a medical point of view. To resolve this question about the validity of middle-class values which are the backbone of public school socialization, we need to break down the stereotype into its components, and to ascertain which (if any) elements may be serviceable universally for all members of our society, which may be of limited service to members of some subcultures but not others, and which (if any) may simply be useless and superfluous residues of traditionalism.

A second point I would make before leaving this issue is this: Procrustean education is usually bad education. Stretching the guest to fit the bed is not substitute for building the bed to fit the guest. Gradually we have come to recognize that in the cultivation of intellectual skills, all children do not begin at the same point, and particular procedures of training are not equally effective for all children. In that remote day toward which I aspire when educational researchers will have something substantial to say about the socialization process in education, I assume we may likewise recognize that we need more than one socialization model for different kinds of children as members of different subcultures. I would direct you to Boyd McCandless's textbook: Children and Adolescents for a most exciting discussion of "The Middle Class Teacher and the Every Class Child."

Now--having used half my time to talk about issues to which many of you must have responded with a "So what else is new; I've heard all of that before" attitude--let me now offer something more specific about potentially worthwhile lines of investigation to better understand the socializing role of the teacher, and eventually to plan and implement better models for teacher function.

To structure this, let me first identify two major devices of socialization, or vehicles through which the teacher may serve as an agent of socialization: (1) as manipulator of reward and
punishment contingencies for all kinds of behavior displayed by the child, and (2) as a highly visible and potent model providing an example to be emulated by the child as he seeks new ways of behaving. In both cases, these elements of the teacher's role are inevitably present, whether they are explicitly planned and examined as a part of the curriculum or not.

I. The Teacher as Manipulator of Rewards and Incentives

The most direct means of function of an agent of socialization is simply through the management of reward and punishment contingencies related to various behaviors. The parent socializes by both implicit and explicit reward of desired behaviors, and punishment of undesired behaviors. This function is assumed by the teacher as the child moves into a school setting, and the devices as well as the standards utilized by the teacher may be either incongruent or congruent with those the child has experienced earlier in his primary socialization within the family.

A variety of techniques may be available to the agent of socialization, ranging from basic physical punishment and tangible bribes or rewards (paddling, candy, ice cream cones), to symbolic devices (black marks for bad behavior and gold stars for good), to interpersonal warmth and affection (nurturance, affection, social acceptance, etc.). Most teachers utilize the full gamut of such devices in varying degrees. And children vary widely in their responsiveness to and experience with these various kinds of reinforcers. In general, middle class children are more highly responsive to interpersonal and social rewards and punishments (warmth, verbal approval, social rejection, etc.) than are lower class children, whose experience seems to be greater with tangible rewards and punishments. Thus, to the extent that teachers are inclined to gravitate toward the middle-class values and habits, they may utilize techniques that are congruent with earlier socialization for the middle-class child but
incongruent for the lower-class child. Perhaps early education requires either revision of the teacher's technique, or re-socialization of the child to restandardize his vocabulary of rewards and punishments.

A number of investigations have demonstrated the extent to which social rewards and incentives (social acceptance, approval, and affection) are potent incentives used by the teacher to control the performance of the child in the school setting. For examples of worthwhile research along these lines, I would direct you to the work of Stevenson, Hartup, and Moore at Minnesota; of Gewirtz and Baer at Washington and later at Kansas; of Sears at Harvard and Stanford; and for interesting research arguing the efficacy of any kind of reinforcement, so long as it is standardized and systematic, to the work of Horowitz, Etzel, and others at the University of Kansas, and of Miller and others at Peabody.

There are also marked differences among children in their capacity to suspend gratification in their pursuit of goals. The "DGS" (Delayed Gratification Syndrome) has been identified as a differential characteristic of the middle and lower classes in our society, with the middle class child responding well to promised but delayed rewards and the lower class child responding better to immediate rewards. Presumably, certain kinds of training, both with respect to cultivated extension of the delay interval, as well as with respect to acquisition of capacity for self-administered intermediate symbolic rewards are required to fully develop the child's capacity to control his behavior in terms of more remote and distant goals instead of in terms of immediacy only. This element of socialization would be particularly critical in the teacher's role at the preschool and early elementary level with socioculturally disadvantaged children.

Along these lines, then, it follows that analysis of the role of the teacher must direct attention squarely to her management of reinforcement contingencies. Meyer and Dopyera
at Syracuse have pursued some initial efforts along these lines, attempting to identify and quantify the teacher's utilization of sanctions for behavior in the classroom. The analysis of maternal teaching style in mother-child interactions studied by Hess and Shipman touches upon related issues. But on the whole, surprisingly few efforts to analyze curriculum and management of the teaching process have included adequate representation of this dimension of the teacher's role. We need to know a great deal more about the vocabulary of rewards, incentives, and goals through which the teacher and the learner communicate in the educational process. And we need to apply what knowledge we already have a great deal more explicitly in planning new and better curricula.

II. The Teacher as Exemplary Model

A second device through which the teacher serves as agent of socialization is simply through her provision of an example with which the child may identify and after which the child may model his behavior through copying and imitation. As in the case of reinforcement management, the teacher may provide a model which is more congruent with prior experience of the middle-class child than for the lower-class child. In fact, unfortunately it is conceivable that the teacher may be so alien for some children as to provide an inverse model to be shunned rather than copied. Moreover, the teacher's behavior may or may not be a serviceable example for learning appropriate adult behavior defined according to the subculture of the child. Just as female adults may be inappropriate models for boys in kindergarten, we must also consider the validity of adult white models for Negro or Indian children. Congruent with my earlier remarks, I would suggest that we need not throw the baby out with the bath water, but we should examine critically the validity of the teacher as a model or example, and isolate the effective and appropriate elements from the irrelevant or inappropriate.
In any case, the modeling function of the teacher is an aspect of her role which is carried out implicitly and with little awareness of its significance. Unfortunately, direction of attention into this important aspect of her role as socialization agent may make the teacher self-conscious and eventually less effective as a teacher. Nevertheless, I would insist that there be full understanding of the nature of her function as a model and example, and of her capacity for using this function effectively and to advantage. Very few, if any, curricular analysis systems that I have encountered even approach this aspect of teacher function.

The research in child development along these lines has been particularly rich in recent years, but largely confined to parent-child interaction and familial socialization. I would call your attention to the work of Bill Hartup, Ross Parke, Richard Walters, Al Bandura, and Leonard Berkowitz along these lines. There has been, until recently, a predominance of interest in aggressive and dependent behavior, but there is, of course, no real reason for confining research to those areas as we explore the modeling role of the socializing agent. Moreover, the teacher is a "manager" of the peer group as a potent socializing force, and her management of group dynamics and interpersonal influence is critical in steering peer group socialization of the child.

Now, let me shift the structure a bit. Instead of further discussing functional aspects of the teacher's role in socialization, let me turn to the content of her role. What specific areas of development may she influence as an agent of socialization? I will confine myself to five categories which I regard as critically significant and closely interrelated within the overall scheme of education: (1) cultivation of particular learned incentives, goals, and values; (2) cultivation of socially defined habits as preferred instrumental routes to goals; (3) facilitation of development of a healthy and realistic conception of one's self and one's role in society; (4) facilitation of
understanding of society's standards of desirability and acceptance; and (5) facilitation of internalization of appropriate moral standards or elements of conscience which autonomously direct behavior along socially appropriate and productive routes.

Let me stress again that I am not simply "taking these on" as additional functions of the teacher beyond her concern for intellectual and cognitive development; I argue that they are integral aspects of the accrual of cognitive and intellective skills and behaviors. Kuno Beller makes this point tellingly in his own research. School achievement is performance, and performance is the product of cognitive function in combination with motivational, attitudinal, and emotional components.
This study was undertaken to validate a number of scales which we have constructed for the purpose of measuring styles of teaching and classroom climates. Two methods of validity were employed. One method consisted of asking the regional educational supervisor of the Summer Headstart Program to select three teachers whom she considered good and potentially effective teachers, and three other teachers whom she considered as lacking the strong points of the first three. After the supervisor had made the selection, she was asked to state as explicitly as possible those characteristics of "good and effective" teachers that served as criteria for her selection. The information thus elicited from the supervisor will be reported in the procedure section below. The validation consisted of applying the scales we had constructed to the six teachers, and seeing whether our scales would differentiate between these two sets of teachers.

The second method of validation was that of predictive validity. In order to find out whether our scales measured effectiveness of teaching, we tested certain predictions from our measures of teaching styles to variations in learning and performance on our intrinsic problem-solving task for children who had been exposed to different teachers.

**Subjects:** Eighteen teachers of Get Set and Headstart classes, 122 children attending six different Summer Headstart classes, and twelve different Get Set classes.

**Procedure:** Three of the six Summer Headstart teachers were selected by the regional Headstart Supervisor as "good and effective" teachers, while three other teachers were selected on the basis of lacking these characteristics. When the supervisor was asked to describe what she considered the
essential characteristics of the three "good and effective teachers," she offered the following three characteristics: warmth, having a well-prepared program, and being child-oriented. The other three teachers, presumably, lacked these characteristics. Since two of our scales, namely, closeness to children and child versus group-oriented (see attached scales) corresponded almost exactly to "warmth" and "child-orientation" as defined by the supervisor; and since the third characteristic, namely, being well-prepared, was at least relevant to two of our scales dealing with curriculum, we could expect valuable validity information from a comparison of the two sets of three teachers on the basis of their scores on our scales. As indicated earlier, our second validity criterion consisted of predictions from our scales to the children's performance on the intrinsic problem-solving task. All children were administered thirty trials of our intrinsic problem-solving task. Our prediction was that successful performance on these tasks will be associated with high scores on our scales of approval, closeness to children, individual orientation, flexible classroom arrangement, encouraging exploration (in approach to learning), flexibility in programming, and low scores on our scales of control of children, control of materials by teachers, and distinction between work and play.

The same six observers who carried out observations in a study (Beller, 1969) were rotated in pairs and assigned randomly to twelve observations in each of the six classrooms. The observations were the same as the ones described in the previous study (Beller, 1969). These observations concentrated for fifteen minutes on the dependency sequences in the interaction between the observed child and his teacher. The observations were always carried out by pairs of observers simultaneously in order to obtain reliability for both our observation categories of child-teacher interaction and our scales measuring teaching styles. However, observers scored
teachers on the teaching style scales only twice, that is, after six and twelve observations of the same teacher.

The Problem-Solving Task: The problem consisted of finding an object hidden under one of three boxes. The three boxes were identical in shape and differed from one another only in size. The solution of the problem was the discovery that the object was always hidden under the middle-sized box. The child was told: "There is a way you can always tell which box it is hidden under. I always put it under the correct box." The experimenter permitted the child to correct errors in each trial, therefore two errors were possible on each trial. The boxes were presented in a standardized, random order on 30 successive trials.

Conditions of Reinforcement: The learning task was presented under two conditions of reinforcement: extrinsic social and intrinsic nonsocial reinforcement. Under the condition of extrinsic social reinforcement, the child was first shown the object which was to be hidden under one of the three boxes. He was asked to point to the box which hid the object. The child was told that the experimenter would inform him whether his pointing response was correct or incorrect. When his response was incorrect, the child was encouraged to try again. When the child made the correct response, he received confirmation and verbal praise for his achievement, consisting of the comments, "Good," and "Very good." Under the condition of intrinsic or nonsocial reinforcement, the child was encouraged to pick up the box and see for himself whether his response was correct or not. Once he made the right response and discovered the object, he received no other reinforcements, that is, in the intrinsic condition the child had to rely on the perception of the outcome of his own performance to discover the correct solution. The experimenter was trained to provide as little social reinforcement as possible through smiles, gestures, eye movements, etc., under the intrinsic condition. In short, the source of reinforcement was an intrinsic part of the task, namely, solving the problem. Moreover, the criterion for the correctness of the
solution was an objective one. In contrast, under the extrinsic condition, the source of the reinforcement was subjective and emotional. When the child made a correct response, the experimenter provided the cue through a verbal comment, based on the decision of the experimenter, and indicated her approval through broad smiling or other facial and body gestures. In short, the reinforcement was extrinsic to the task itself and came from a social agent. This has been the rationale for our referring to the first condition of reinforcement as intrinsic nonsocial and to the second as extrinsic social.

**Results:** The data collected for this study have been processed and are currently being analyzed. Several findings have been assembled and will be presented in a preliminary way for the purpose of the present report.

In order to determine the empirical structure of our scales of Teaching Style, we factor analyzed the data obtained on 18 different Headstart teachers. The outcome of this factor analysis is presented in Table 1. Each correlation matrix, with squared multiple correlations as communality estimates, was subjected to principal axis factor analysis by means of the BMD-X72 factor analysis program. Oblique simple loading rotation was also performed with the number of factors rotated being determined by the number of initial factors with eigen-values greater than unity. An inspection of Table 1 shows that our scales yielded two fairly independent Factors (r = .22) for nine out of the ten scales which we have constructed. The first Factor may be described as a Social Factor and the second as a Curriculum Factor. On the basis of the first Factor, it would seem that we can distinguish between teachers who are controlling, detached, oriented towards a group rather than an individual child, concerned with providing factual material, criticizing the child and finally discontent with their teaching functions as over and against a teacher who gives the children a good deal of freedom, relates affectionately and sensitively to individual children, is more child
TABLE 1

FACTOR ANALYSIS OF TEN SCALES OF "TEACHING STYLES" BASED ON DATA OBTAINED FROM SIX OBSERVERS OF EIGHTEEN HEADSTART TEACHERS

<table>
<thead>
<tr>
<th>SCALES</th>
<th>FACTOR I</th>
<th>FACTOR II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Controlling Children</td>
<td>.94</td>
<td></td>
</tr>
<tr>
<td>Closeness to Children</td>
<td>.84</td>
<td></td>
</tr>
<tr>
<td>Individual Child Oriented</td>
<td>.70</td>
<td></td>
</tr>
<tr>
<td>Approval Oriented</td>
<td>.92</td>
<td></td>
</tr>
<tr>
<td>Encouraging Exploration</td>
<td>.76</td>
<td></td>
</tr>
<tr>
<td>(Approach to Learning)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enjoying Teaching</td>
<td>.87</td>
<td></td>
</tr>
<tr>
<td>Work-Play Distinction</td>
<td></td>
<td>.87</td>
</tr>
<tr>
<td>Flexible Classroom Arrangement</td>
<td></td>
<td>.83</td>
</tr>
<tr>
<td>Flexible Curriculum</td>
<td></td>
<td>.60</td>
</tr>
<tr>
<td>Control of Materials by Children</td>
<td>.53</td>
<td>.52</td>
</tr>
</tbody>
</table>
oriented, encouraging individual children to explore and appear to enjoy their teaching function. On the basis of the second Factor, the Curriculum Oriented Factor, we might distinguish between teachers who emphasize the distinction between work and play, who insist on a rigid arrangement of the classroom, and who emphasize routine planning with a minimum of spontaneity as over and against teachers who let the children move freely between play and work, who let the classroom arrangements vary with activities and needs of individual children and who improvise spontaneously the curriculum. It has to be remembered that these factors emerged from the study of teachers in pre-school classes. Conceptually, the important conclusion to be drawn from the findings presented in Table 1 is that our scales do provide a meaningful pattern of teacher behavior which consists of a social interpersonal component and of a curriculum component.

The first validity test of our scales consisted of a comparison between the two groups of Headstart teachers selected as "good" and "poor" teachers by an educational supervisor. When we compared the two groups on our ten scales of teaching style, we found that eight of the ten scales differentiated the two groups of teachers in the predicted direction. (See Table 2). Thus the good teachers were characterized by giving the children more freedom, being more affectionate in their interaction with children, being more oriented towards the individual child, encouraging individual children, and finally enjoying their teaching function. With regard to curriculum, the group of good teachers were characterized by our scales as making less distinction between work and play, being somewhat less rigid in their classroom arrangement, and giving the children more opportunity to control materials than the group of teachers designated as poor teachers by the educational supervisor. Clearly, the direction of these differences as determined by our scales would be what one would expect in distinguishing between good (warm) and poor (cold) teachers, particularly for pre-school classes.
TABLE 2

AVERAGE SCORES OF THREE GOOD (WARM) AND THREE POOR (COLD) TEACHERS ON TEN SCALES OF TEACHING STYLE

<table>
<thead>
<tr>
<th>SCALES</th>
<th>TEACHERS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Good (Warm)</td>
</tr>
<tr>
<td>Controlling Children (9-1)*</td>
<td>6.00</td>
</tr>
<tr>
<td>Closeness to Children (1-9)</td>
<td>5.70</td>
</tr>
<tr>
<td>Individual Child Oriented (1-9)</td>
<td>4.80</td>
</tr>
<tr>
<td>Approval Oriented (9-1)</td>
<td>3.40</td>
</tr>
<tr>
<td>Encouraging Exploration (1-9)**</td>
<td>5.10</td>
</tr>
<tr>
<td>Enjoying Teaching (9-1)</td>
<td>3.20</td>
</tr>
<tr>
<td>Work-Play Distinction (9-1)</td>
<td>5.08</td>
</tr>
<tr>
<td>Flexible Classroom Arrangement (1-9)</td>
<td>6.80</td>
</tr>
<tr>
<td>Flexible Curriculum (1-9)**</td>
<td>5.13</td>
</tr>
<tr>
<td>Control of Materials by Children (1-9)</td>
<td>4.20</td>
</tr>
</tbody>
</table>

* 1-9 indicates that high score means high on scale.
9-1 indicates that high score means low on scale.

** These two scales failed to go in the predicted direction.
The second validity test of our scales consisted of comparisons on success in problem-solving under intrinsic reinforcement conditions between the children of teachers who fell above and below median on our scales of teaching style. Figures 1 to 4 represent learning curves on our problem-solving tasks for children of teachers falling above and below the median on five of our scales on which a consistent difference between the two groups emerged. Inspection of Figures 1 to 4 shows that children of teachers who made less distinction between work and play (Figure 1), who interacted affectionately with the children (Figure 2), who were more flexible in their classroom arrangement (Figure 3), and more flexible in programming their instruction (Figure 4) performed better on our problem-solving task under conditions of intrinsic reinforcement than did children from teachers with opposite characteristics. In the one other instance in which a trend barely appeared to emerge, the trend failed to go in the direction which we would have predicted. Children of teachers who appeared to be discontent with their teaching function performed as well as or better than other children on problem-solving under conditions without social support. On the remaining five scales, no clear trend emerged in our comparisons.

One might conclude from these findings that our second validity test gave some support to our scales since forty percent of the scales had the predicted consequences for certain teacher characteristics to be associated with better problem-solving ability of children. None of the remaining scales yielded a clear trend in the opposite direction.

Implications for Further Study: The initial investigation of our scales has yielded both conceptual and empirical validity of the usefulness of classifying teacher behavior and as a predictive tool for pupil success on cognitive tasks. The scales enable us to distinguish between a social interpersonal interaction component and a curriculum component in teacher
behavior. We plan to further apply these scales in conjunction with the intervention program which is being planned for the Headstart Centers at Temple University as well as two different Follow Through Programs being planned by the Philadelphia School System.
Fig. 1. Problem solving performance over 30 trials by children from teachers making frequent or infrequent work-play distinctions.

Fig. 2. Problem solving performance over 30 trials by children from teachers who are predominately detached or close to the child.
FIG. 3. Problem solving performance over 30 trials by children of teachers maintaining rigid or flexible classroom arrangements.

FIG. 4. Problem solving performance over 30 trials by children of teachers maintaining rigid or flexible teaching programs.
BELLER SCALES

TEACHER RATINGS

Control of Children

Please rate the extent to which the teacher controls the class by issuing orders and commands. Is a suggestion mandatory or optional?

1. _______ The teacher issues peremptory orders.

2. _______

3. _______ The teacher's orders and suggestions are not completely coercive.

4. _______

5. _______ The teacher is coercive in some matters, but optional suggestions are also used.

6. _______

7. _______ The teacher tends to avoid coercion wherever possible.

8. _______

9. _______ The teacher consistently allows the children a very wide range of free choice.
BELLER SCALES

TEACHER RATINGS

Distinction between Work and Play

Please rate the extent to which the teacher distinguishes between work and play.

1. _______ Distinguishes always.

2. _______

3. _______ Distinguishes often.

4. _______

5. _______ Permits some overlap.

6. _______

7. _______ Permits much overlap.

8. _______

9. _______ Makes very little distinction.
TEACHER RATINGS

Approval-Disapproval

Please rate the direction of the teacher's critical reaction to the behavior of the children. Is the teacher's reaction generally one of praise and approval, or does the teacher usually blame and disapprove?

1. _______ Praise and commendation given frequently and liberally.

2. _______

3. _______ Emphasis on approval. Disapproval is mild and infrequent.

4. _______

5. _______ Approval and disapproval are balanced.

6. _______

7. _______ Emphasis on disapproval. Approval is mild and infrequent.

8. _______

9. _______ Continuous disapproval and fault-finding.


TEACHER RATINGS

Closeness to Children
Please rate the extent to which the teacher seems to be really close to and in touch with the children.

1. _______ The teacher is very detached.

2. _______

3. _______ The teacher is somewhat aloof.

4. _______

5. _______ The teacher interacts easily with the children.

6. _______

7. _______ The teacher is somewhat involved in the emotion and feelings of the children.

8. _______

9. _______ The teacher is very sensitive and responsive to the feelings and needs of the children.
TEACHER RATINGS

Enjoyment of Teaching

Please rate the general attitude expressed by the teacher regarding her teaching experience.

1. Fully enjoys each day's activities and discusses work with enthusiasm and involvement.

2. 

3. Enjoys teaching most of the time and generally manifests interest in work.

4. 

5. Has mixed feelings and fluctuates in attitude about teaching.

6. 

7. Sometimes expresses dissatisfaction regarding teaching.

8. 

9. Expresses discontent with teaching and performs duties in perfunctory manner.
TEACHER RATINGS

Individual vs. Group Needs

Please rate the extent to which the teacher seems to be concerned with and attentive to the needs of individual children or the class as a whole. Does the teacher direct her efforts toward the group as a group rather than allowing children to be "special" or "different"? Or does she become deeply involved with a particular child or a few children rather than with the group as a whole?

Please do not rate the teacher on how well she attends to individual or group needs, but only the direction of her concern.

1. _______ Group needs dominant.

2. _______

3. _______ Group needs are more prominent than individual needs.

4. _______

5. _______ Varies between group needs and individual needs.

6. _______

7. _______ Individual needs are more prominent than group needs.

8. _______

9. _______ Individual needs dominant.
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2. ________

3. ________Group needs are more prominent than individual needs.

4. ________

5. ________Varies between group needs and individual needs.

6. ________

7. ________Individual needs are more prominent than group needs.

8. ________

9. ________Individual needs dominant.
BELLER SCALES

TEACHER RATINGS

Classroom Arrangement

Please rate the teacher to the extent to which she arranges the place, i.e., physical location and movement of children in the group.

1. __________Children's place in the group arranged and assigned by teacher: almost all of the time.

2. __________

3. __________Children's place in the group arranged and assigned by teacher: much of the time.

4. __________

5. __________Children's place in the group arranged and assigned by teacher: from time to time.

6. __________

7. __________Children have considerable freedom in choosing their own physical location and movement in the group.

8. __________

9. __________Children have much freedom in choosing their place. The teacher functions primarily as a facilitator of a child's choice.
TEACHER RATINGS

Approach to Learning

Please rate the extent to which the teacher gives the pupils learning experiences which are assortments of facts, exercises or practice by repetition. For example, does the teacher stimulate the children to wonder or does she present a lesson or demonstration expecting the children to learn by practice and imitation?

Please do not rate the teacher on how successfully she either supplies facts or stimulates thinking. Consider only the extent to which she seems to be trying to do one or the other.

1. The teacher provides demonstrations, facts and information.
2. 
3. The teacher emphasizes mainly the acquisition of skills and information, but occasionally provides opportunity for spontaneous inquiry and expression.
4. 
5. The teacher does some of both; giving information, teaching skills and inquiry and independent thought.
6. 
7. The teacher emphasizes mainly stimulation of independent inquiry and expression, and only occasionally provides information and skill practice to her children.
8. 
9. The teacher encourages the children to think and explore. She provides facts and skill training only when requested by the child or as a part of the child-initiated activities.
Flexibility in Programming

Please rate the extent to which the teacher's activities are tied to an organized schedule. Is the class routine so rigidly scheduled that the reactions of children are disregarded when they do not fit the teacher's program or does the teacher seem to adapt her curriculum to the child's need and situational context?

1. _______ The teacher always follows a schedule or planned program.

2. _______

3. _______ The teacher tends to follow a planned program but deviates occasionally, allowing changes because of unforeseen events.

4. _______

5. _______ The teacher follows an organized schedule some of the day, but at other times of the day she improvises programs in response to situational demands.

6. _______

7. _______ The teacher sometimes follows a loosely organized schedule, but most of the time she provides the materials, letting the children direct their activities.

8. ______

9. _______ The teacher does not seem to impose any specifically planned program, but functions essentially as a catalyst and facilitator, channelizing interests and activities of individual children or subgroups of children.
BELLER SCALES

TEACHER RATINGS

Control of Materials

Please rate the extent to which the teacher controls instructional materials.

1. _______ Teacher clearly and firmly directs the use of materials.

2. _______

3. _______ Teacher directs use of materials most of the time.

4. _______

5. _______ Teacher and children fluctuate in determining choice and use of materials.

6. _______

7. _______ Children select materials to be used most of the time. Teacher remains in the background or facilitates.

8. _______

9. _______ Children are dominant, may select and use materials at will.