CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter presents a review of the relevant literature studied to gain insight into the problem and search for the basis of the independent and dependent variables. The study of literature was guided by such questions as: What has been accomplished in the area of teacher effectiveness research? What are the limitations of the work accomplished? What are the directions along which further efforts should be channelled? What are some of the teaching acts or classroom behaviour patterns found to be positively related to pupil outcomes? What are the training experiences found to be effective in developing desirable teaching behaviour patterns in student-teachers? Keeping these questions in mind, the review has been organized into three parts viz., the review of other reviews on the subject, process-product studies, and presage-process studies with particular
reference to training experience as the presage variable. Studies conducted in India have been reviewed separately at the end. The review, by and large, is confined to the studies which have used systematic observation of classroom behaviour as process variable.

REVIEW OF REVIEWS

Research on teacher effectiveness is over half a century old. It is one of the most researched areas in educational research. As a matter of fact, the flow of research on the subject has been so profuse that even the bibliographies have become unwieldy. The sheer quantum of work and non-availability of all research reports preclude coverage of all the individual studies in this review. Moreover, the present study draws from and contributes to the emerging teacher effectiveness research employing objective, reliable, and systematic classroom observation to measure teaching behaviours or acts. Thus, studies falling outside this realm are of peripheral importance for the present study. This review provides an overview of the area of teacher effectiveness as viewed by various reviewers from time to time, and is a prelude to the review of specific studies that follows in subsequent sections.
Till late, research efforts in the area of teacher effectiveness met with little success. That is why a series of research reviews on the subject are plagued by pessimism. By and large, results have been inconsistent, inconclusive, and consequently not only discouraging but disappointing too. Orleans and others (1952) found the knowledge of criteria of teacher effectiveness and the means to measure them still missing, despite the large number of studies that have been made. Morsh and Wilder (1954), while reviewing quantitative studies on teacher effectiveness, failed to discover even a single, specific observable teacher act whose frequency of occurrence was "invariably and significantly" related to pupil outcomes. Johnson (1955) found a wide margin of error in evaluation and prediction of teacher effectiveness, despite the overwhelming attention of the research workers it has attracted. Mitzel (1960) pointed out the absence of acceptable criteria of teacher effectiveness. Fattu (1962) lamented the lack of meaningful measurement of commonly agreed upon teacher effectiveness using predictor or criterion variables had reached a dead end. Medley and Mitzel (1963) considered much of this work on teacher effectiveness as irrelevant either because valid criteria of teacher effectiveness were not used or because objective measures of teacher behaviour were not
taken. Biddle feels sore over the research on teacher
effectiveness and observes:

Literally thousands of studies have been report-
ed dealing with characteristics of teachers
(rated or measured), effects of teaching, goals
of education, and other related issues. Yet,
few if any "facts" seem to have been establish-
ed concerning teacher effectiveness, no
approved method of measuring competence has
been accepted, and no methods of promoting
teacher adequacy have been adopted. (Biddle,
1964, p. 2)

There appears to be a persistent thaw permeating
research on teacher effectiveness. Salient reasons
attributed to the prevalent pessimism plaguing the area
given by different reviewers may be summarized as under:

1. Lack of adequate conceptual framework
   (Smith, 1962; Ryans, 1960, 1963; Biddle, 1964,
   1967; Soar, 1964; Gage, 1967; and Turner,
   1971).

2. Lack of agreement on teacher competence
   (Orleans and others, 1952; Johnson, 1955;
   Medley and Mitzel, 1963; Biddle, 1964).

3. Absence of objectives and reliable tools to
   assess teaching behaviour (Ackerman, 1964;
   Howsam, 1960; Medley and Mitzel, 1963;

4. Inadequate methodology (Orleans and others,

5. Complexity of the problem (almost all the reviewers).

**Optimistic Bodings**

Growing consciousness about the limitations of research on teacher effectiveness and the compelling need to achieve the much needed break-through to meet the emerging challenge of teaching effectively stimulated, concerted attempts to salvage the complicated problem. It appears that advice of Ackerman (1964), and Medley and Mitzel (1963) regarding the development of reliable and objective tools to observe, record and analyze teaching behaviour was well taken. Recent developments during the last decade and a half are pregnant with optimism.

Gage (1965) echoed the emerging optimism on research on teaching, when he was faced with the task of searching desirable behaviour of teachers. He justified the review with the hope that recent upsurge in the amount and quality of research on teaching might have rendered the earlier research obsolete. On the basis of the current literature, Gage selected five desirable behaviours, namely, warmth, cognitive organization, orderliness, indirectness, and problem solving.
Amidon and Simon (1965) reviewed studies on teacher-pupil interaction and the tools used for its measurement. The reviewers concluded that there were definite patterns of teacher-pupil interaction in the classroom; that these interaction patterns could be objectively measured and characterized; that achievement, perception, and classroom climate were apparently related; and that the relationship between teacher personality and teacher behaviour was uncertain.

Flanders and Simon (1969), reviewing research on teacher effectiveness from 1960 to 1966, expressed cautious optimism, marshalling a number of studies showing significant positive relationship between teachers' acceptance and use of ideas and opinions expressed by pupils, on the one hand, and pupil achievement, attitudes and other variables on the other.

Rosenshine and Furst (1971) found the process-product studies to be fruitful in generating some of the best variables on relationship between teacher behaviour and student achievement. The reviewers identified eleven such variables. The variables are: clarity, variability, enthusiasm, task oriented or/businesslike behaviours, student opportunity to learn criterion material, use of structuring comments, type of questions, probing, and level of difficulty of instruction. The review also gives
limitations of the work accomplished and outlines the directions along which "second generation" of research workers should direct their efforts.

Jangira (1971), reviewing studies on classroom interaction conducted in India, also supports the optimism, although it is based on very limited studies that have been made so far. The review contains a plea for well designed studies.

Conclusion

The reviews of research on teacher effectiveness started with a pessimistic note persisting for a long time. But in the last decade and a half, an optimistic trend in the reviews is discernible. However, these reviews also have stressed the need for more work of serious quality to consolidate the growing knowledge in the area of teacher effectiveness and advance its frontiers further.

PROCESS-PRODUCT RESEARCH

This section reviews both correlational as well as experimental studies relating teacher behaviour to pupil outcomes using systematic classroom observation. The studies covering pupil outcomes other than academic achievement have also been included.
Earlier Phase

H. H. Anderson and his associates (1939, 1946, 1946) carried out good studies relating teacher contacts and pupil behaviour. The investigators designed two separate observation tools - one to assess teacher behaviour along "dominative-integrative" climate dimension - and another to assess pupil behaviour. The findings as summarized by Flanders are:

...first, the dominative and integrative contacts of the teacher set a pattern of behaviour that spreads throughout the classroom; the behaviour of the teacher, more than that of any other individual, sets the climate of the class. The rule is that, when either type of contact predominates, domination incites further domination and integration stimulates, further integration. The teachers tendency spreads among pupils and persists even when the teacher is no longer in the classroom. Furthermore, the pattern a teacher develops in one year is likely to persist in the classroom the following year with completely different pupils. Second, when a teacher has a high proportion of integrative contacts, pupils show more spontaneity and initiative, voluntary social contribution, and acts of problem solving. Third, when a teacher has high proportion of dominative contacts, the pupils are more easily distracted from school work and show more compliance to, as well as rejection of, teacher domination. (Flanders, 1964, pp. 204-205)

Kurt Lewin's earlier work reprinted (1967) on patterns of aggressive behaviour and experimentally created social climate is another good work. The experiment involved authoritarian, democratic, and Laissez-faire leadership in clubs formed of the children. As the club
meetings progressed, the authoritarian club members developed a pattern of aggressive domination toward one another, and their relation to the leader assumed that of submission or of persistent demands for attention. The interactions in the democratic club were found to be more spontaneous, more fact minded, and friendly.

In a laboratory experiment by Flanders (1951) wherein contrasting teacher behaviours were exposed to one pupil at a time, a sustained dominative pattern was consistently disliked by the pupils, reduced their ability to recall, later on, the material studied, and produced disruptive anxiety as detected by galvanic skin response to changes in heartbeats. Integrative contacts induced reverse responses.

Perkins (1961) using Withall's technique found that group of teachers engender greater learning about child growth and development in integrative type of climate than in dominative type.

Towards the Goal - Step by Step

Flanders conducted a number of studies involving several grades and different subjects to find out the relationship between teacher influence, and pupil achievement and pupil attitudes. Flanders (1965, 1969, 1970) provide the necessary details. Teacher influence has been found to have significant positive relationship with
adjusted pupil achievement and pupil attitude. In Flanders' own words the conclusions can be summarised as under:

Six out of seven projects, it appears that when classroom interaction patterns indicate that pupils have opportunity to express their ideas, and when these ideas are incorporated into learning activities, the pupils learn more and develop more positive pupil attitudes towards the teacher and the learning activities. (Flanders, 1970, p. 401)

Morrison (1966) found significant relationship between teacher influence, and adjusted pupil achievement scores of language usage, social study skills, and arithmetic computation and problem solving, as well as, pupil attitudes. Nelson (1964) found similar support in a study of learning linguistic skills.

Lashier (1967), in a study to find out relationship between verbal behaviour of student-teachers, and achievement and constructive attitudes of eighth grade pupils during a six week period of instruction devoted to Biological Sciences Curriculum Study Laboratory lesson entitled Animal Behaviour, supported the above relationship.

Furst (1967) used Flanders Interaction Analysis to reanalyse the classroom data which was analyzed previously by researchers using Bellack's cognitive categories. Fifteen teachers and 345 students in seven high schools in the metropolitan New York area participated in
the study. All classes were given the same texts with four days set as the instructional period. Students were pretested and post-tested on a knowledge test designed by Bellack team to duplicate both the substantive content and the logical processes assumed to be required for mastery of the material. The conclusions are:

The teachers of the high achieving group tended to be more indirect than direct. Teachers of the low achieving group tended to use more direct than indirect influence. The teachers of average group tended to minimise affective behaviours, concentrating on lecturing. (Furst, 1967, p.24)

Herman (1967) in a study to determine the specific kinds and time lengths of activities in which three groups of fifth grade children - above average, average and below average - were engaged from the time the social studies period began until it ended. The study also attempted to assess the teacher-pupil verbal behaviour which occurred during the observations. It was found that the teachers of the above average group were indirect i.e. they used more praise, questions, and acceptance of pupil ideas than they used lecture, commands, and criticism in the verbal patterns; the teachers of the average group were nearly neutral i.e. one direct statement for each indirect statement in verbal patterns; and the teachers of the below average group were direct in verbal patterns.

Schantz (1967) studied the effect of teacher influence on verbal recall of the high and low ability
pupils. The study involved 24 girls and 37 boys. The study indicated that all groups showed learning increments. The author concluded:

...if both groups were assumed to be comparable on the pretest their learning increments were greater as measured by both tests through mean scores following indirect methods. (Schantz, 1967, p. 46)

Amidon and Giammetteo (1967) identified 33 superior teachers as adjudged by their supervisors and administrators and compared them with 120 randomly selected teachers constituting the average group, on classroom behaviours. The superior teachers were found to be more indirect than the average group. Pankratz (1967) located 5 'high' and 5 'low' teachers of high school Physics, from a sample of 30, by using principal's ratings, class averages of a pupil attitude inventory, and a "teacher situation-reaction test" completed by each teacher. Using expanded version of Flanders Interaction Analysis Categories, developed by Hough, it was found that the teachers classified as more effective according to the three scores, made more use of the ideas and opinions expressed by pupils at .01 level of significance, than the less effective teachers.

Weber (1968) found pupils with teachers using indirect influence in the classroom scoring higher on verbal creativity than pupils with teachers using direct
Alexander (1970) in mechanical drawing classes found classroom climate associated with the level of manipulative skills the pupils develop. Using Withall's technique, learner-centred climate was found to enhance the development of significantly higher levels of manipulative skills in the children.

Soar (1969), in a well designed experiment, reported several consistent results relating indirect classroom behaviour of teachers and superior growth of pupils, but showed the relationship to be curvilinear.

Coats (1966) reanalysed the relationship between pupils' attitude and achievement scores versus classroom interaction variables derived from 10x10 interaction matrix. Carrying out stepwise linear regression of the data reported earlier by Flanders (1965) and Morrison (1966), he found possible the accurate predictions of the post-test class average scores from the pre-test averages. This further supports the relationship.

Johns (1968) conducted a study to find out relationship between teacher influence and level of thought provoking questions asked by the pupils. The study reports a positive relationship between teacher influence and levels of the questions asked by the pupils—indirect teachers eliciting higher level of questions
from the pupils than direct teachers though the incidence is very low. Parakh (1965) and Dodl (1966) supported the finding.

There are a few studies which did not use direct measures of classroom behaviour, but they estimated the same. However, their findings are significant. Cogan (1956) administered a paper-pencil tool having three scales - one asking pupils to give perceptions about their being considered central to the decisions taken in the classroom - another asking how often they did the school work required of them, and the last asking how often they did the school work not required of them. The pupils whose perceptions revealed high acceptance and use of their ideas in the classroom decisions, did significantly more often the work required of them and the work not required of them, than pupils whose perceptions revealed lower acceptance and use of their ideas in the classroom decisions. Miller (1966) in an experiment with four teachers, each teaching four lessons in a "responsive manner" and a "directive" manner", found that students in "responsive" teaching viewed the lessons more favourably and exhibited significantly higher levels of thinking than the students in directive teaching.

A few studies failed to support the above relationship (Snider, 1966; Berkin, 1967; and Measel, 1967).
Conclusion

Despite a few studies failing to support the relationship between teacher acceptance and use of pupil ideas and product-variables, it appears that teacher responsiveness rather than initiation, teacher acceptance and use of students' ideas or opinions, and flexibility of teacher influence in the classroom, are positively related to pupil achievement in different content areas, as well as a number of other outcome variables like attitude, independence and self-direction, verbal recall, creativity, incidence of thought provoking questions, manipulative skills, etc. This implies that the Classroom Behaviour Training proposed in the present study should take into account the teaching behaviour patterns based on these findings.

PRESAGE-PROCESS RESEARCH

Presage-process research includes studies linking teaching process to teacher characteristics and formative experiences. This section, however, is confined to the research linking training experience of teachers and their teaching behaviours. Both pre-service as well as inservice research projects have been covered in the review.

Flanders (1963), in an inservice project, investigated the effects of teaching experienced teachers how to
analyse their teaching behaviours using interaction analysis. The purpose of the project was to increase the flexibility of teacher influence, to increase the use of those teacher behaviours which support pupil participation in classroom learning. The two inservice programmes were differently administered through two different types of role the instructor was to perform. It was hypothesized that a teacher would gain most from inservice training when his style of teaching was compatible with the one used by the training instructor. The teachers spent 30 hours in formal training sessions. Feedback was provided on the basis of interaction analysis. One training programme was shown to be more effective in producing change in most of the teachers than the other.

Amidon and Powell (1966), conducted an experimental study involving four groups of 15 student-teachers each. The first group had interaction analysis and seminar, and was supervised by a cooperating teacher trained in interaction analysis. The second group had interaction analysis and seminar, and was supervised by a cooperating teacher not trained in interaction analysis. The third group had learning theory and seminar, but was supervised by a cooperating teacher trained in interaction analysis. The fourth group had learning theory and supervised by a cooperating teacher trained in learning theory. It was found that:
1. the student-teachers who knew interaction analysis talked less, were more indirect in their use of motivating and controlling behaviours, more indirect in their overall interaction patterns, used more extended indirect influence, than the student-teachers who were not trained in interaction analysis; and

2. the student-teachers whose cooperating teachers learnt interaction analysis used less extended direct influence than their counterparts.

Moskowitz (1967) in a study with a similar design as Amidon and Powell (1966), studied attitudes of the cooperating teachers. The cooperating teachers received 30 hours of training in interaction analysis, while the student-teachers received 60 hours of training in interaction analysis. The student-teachers were administered TSRT, CTAQ, and STAQ, to assess their attitudes. Moskowitz found that:

1. trained cooperating teachers and trained student-teachers who worked together, used significantly more indirect teaching patterns, than untrained cooperating teachers and untrained student-teachers working together;

2. trained student-teachers used significantly more indirect teaching patterns than their untrained cooperating teachers;

3. there were no significant differences between the teaching patterns of untrained student-teachers and their trained cooperating teachers; and

4. untrained student-teachers whose cooperating teachers were trained, were more indirect than the untrained student-teachers whose cooperating teachers were also untrained.

No significant differences were noted between the
attitudes of the trained and untrained cooperating teachers towards their student-teachers. However, examination of the means indicate:

1. the most positive mean scores were those of the cooperating teachers in the group, wherein, both cooperating teachers and student-teachers were trained;

2. the next positive mean scores were those of the cooperating teachers in the group, in which only cooperating teachers were trained;

3. third was the group in which cooperating teachers were not trained, but their student-teachers were trained; and

4. the group in which both cooperating teachers as well as the student-teachers were untrained, was at the bottom.

Zahn (1967), in a similar study found the use of interaction analysis as means of supervision of student-teaching related to a positive change in the attitudes of the student-teachers. He concluded that while personality of the supervisor seems to affect the attitude of the student-teachers, method of instruction and supervision used by the supervisor also appears to affect the same.

Simon and others (1966) report that student-teachers trained in interaction analysis tend to be more accepting, have more student initiated talk, are less directive, less critical, have more extended student initiated talk, and less silence and confusion, than the student-teachers trained in learning theory alone. When
both student-teachers and cooperating teachers know interaction analysis, the students have maximum opportunity to develop their own styles of teaching and appear to increase individuality in teacher behaviour. Simon (1967) finds no significant differences in the group of student-teachers trained in interaction analysis, when they teach in their preferred classes. Kirk (1967) also supports the training in interaction analysis as means of developing indirect teacher influence.

Hough and Ober (1967) report a two-year experiment of course revision and evaluation. Five treatments involving various combinations of methods of teaching human relations skills and the analysis of classroom behaviours were planned. Subjects in the treatment taught interaction analysis were found to use, in their teaching simulations, significantly more verbal behaviours related to higher achievement and more positive student attitudes towards their teachers and school. Lohman, Ober, and Hough (1967), following up 30 student-teachers who were trained in interaction analysis prior to student-teaching, with a control group of 30 student-teachers who had not been trained so, found that the student-teachers in the experimental group used more indirect and less direct teacher behaviours, than the control group in their student-teaching, even 4 to 12 months after their training in interaction analysis. Hough and Amidon (1967) in a
study to test effectiveness of the two courses, one based on interaction analysis and another on learning theory, found that the student-teachers trained in interaction analysis were adjudged to be more effective than the control group in their student-teaching.

Hanny (1967) reports that preservice teachers who are highly dogmatic as measured by Dogmatic Scale and who receive "less desirable" scores on the Teaching Reaction Test can be taught interaction analysis, and that they are able to use this system to control their behaviour, and use desirable behaviours that affect classroom climate. Ishler (1967) successfully helped student-teachers in changing their verbal behaviour from teacher-centred to learner-centred through feedback using Withall's Social-Emotional Climate Index.

Davidson (1968) in an experiment found that feedback based on interaction analysis when provided to a group of teachers, enabled them to modify their influence in the classroom such that children's critical thinking developed and a corresponding decline in non-productive thinking was discernible.

The concurrent arrangement of interaction analysis using Reciprocal Category System of Interaction Analysis and micro-simulated teaching experiences was reported to be the most effective organizational pattern of the
methods and student-teaching block (Wood and others, 1969). Wright, Nuthall and Lawrence (1969) in a systematic study on shaping classroom verbal behaviour of teachers, report that when the student-teachers are provided opportunity to observe the lessons, to learn interaction analysis, and receive feedback through micro-teaching, they understand and use the teaching strategies better. Holcomb (1970) improved attitudes of the student-teachers through kinescopic observation of their teaching behaviours and providing feedback based on the same.

**Conclusion**

A number of studies cited above report effective use of feedback based on interaction analysis, singly or combined with simulated teaching skills training or micro-training, in modifying the behaviour of the pre-service or inservice teachers in the intended direction. In other words, when pre-service or inservice teachers receive instruction in interaction analysis, they analyse their own behaviours, formulate directions of change, receive continuous feedback about their observed teaching behaviours, they tend to change their teaching behaviours in the intended direction. This implies that the Classroom Behaviour Training envisaged for the present study should take into account the rationale provided by the research efforts reviewed above.
Studies Conducted in India

Educational research being still in its infancy in the country, classroom research is yet in its embryonic state in this country. It is only in recent years that the studies based on systematic classroom observation have been initiated. Some of the studies that have appeared so far are discussed below.

Normative

The earlier studies attempted at surveying the classroom behaviour of teachers using Flanders Interaction Analysis Category System. Pareek and Rao (1970) selected 50 fifth grade teachers of Delhi drawn from 50 primary and middle schools. Each teacher was observed three half-hour periods and a total of 84,087 observations were collected. The results revealed that about 55 per cent of the time was spent in teacher talk by Delhi teachers. In about 67 per cent of the periods observed, the teachers used direct influence behaviours about twice the time they use indirect influence behaviour. Only in 11 per cent of the observed periods the teachers used more indirect influence than the direct influence. No sex differences were reported by the study.

Buch and Santhanam (1970) observed 11 teachers teaching English to classes from VI to X. Each teacher was observed twice. In a total observation of 10 hours
and 7 minutes, 14,786 observations were recorded. The teacher talk was found to be 69 per cent, student talk 21 per cent and I/D ratio 0.2. In another study, Buch and Quraishi (1970), involving 17 male social studies teachers of secondary schools in Bamoda, teacher talk was found to be nearly 83 per cent, with student talk about 10 per cent and silence and confusion about 7 per cent. The I/D ratio was 0.17. In the third study, Santhanam, Quraishi and Lulla (1970), 19 women and 17 men social studies teachers were observed. The results indicate that women teachers talk about 75 per cent while men teachers talk about 82 per cent of the total time observed. Students in women teacher classes talk about 13 per cent, while in the case of students in men teachers classes talk 0.5 per cent of the time.

There appears to be a wide variation in the classroom behaviour pattern of the teachers, as revealed by the studies cited above. But in absence of adequate data about the situational differences, the variation cannot be explained.

Process-Product Studies

A few studies relating process-product variables have also appeared in India. Mehta and his associates used training in classroom interaction analysis in their "Laboratory in Achievement Motivation" programme, attempting
to increase the motivational level of teachers, and to help them developing suitable classroom instructional behaviours with a view to developing effective influence strategies as well as to create friendly climates in the classroom. Mehta (1969), Mehta and Kanade (1969), and Mehta and Dandia (1970) reported higher achievement in follow up studies of the experimental groups. The experiments are limited from the viewpoint of interaction analysis, as the results do not isolate the effect of teacher behaviours modified through interaction analysis.

Pareek and Rao, in a study, Motivation Training for Mental Health, however, studied association between the verbal classroom behaviour of teachers and pupil adjustment. The indirect/direct influence ratios of two types showed two different types of associations.

More per cent of students who were well adjusted, more intelligent, high initiative taking, highly impulsive, less need-persistent and more ego-defensive in their reactions to frustration were found in classes taught by teachers with high I/D ratios as compared to the students taught by teachers with low I/D ratios. However, a reverse trend was observed when content controlled I/D ratios were used. (Pareek and Rao, 1971, p.178a)

Mitra (1970-71) observed 78 teachers teaching different subjects in 17 schools of Jabalpur, using Flanders Interaction Analysis Category System, and administered attitude questionnaire to the students under the charge of these teachers. The investigator reports a
positive tendency on the part of the pupils to like teachers who use indirect influence, but it is not significant. Preliminary analysis of the data collected by Lulla (unpublished) in a pretest-posttest control-group design aiming at finding the relationship between pupil achievement and teacher influence, supports Flanders (1965) conclusions.

**Presage-Process Studies**

Only two studies have appeared in India on this aspect. Pareek and Rao (1971) provided a 10 day training in interaction analysis to V grade teachers of Delhi to modify their classroom interaction patterns. Both experimental and control groups of teachers were observed before and after training. Post-training observations were collected up to a period of 6 months after the training. The experimental group of teachers reported to have modified their classroom behaviour patterns from direct to indirect and maintained them consistently.

Nath (1971) conducted an experiment to study the effect of feedback based on interaction analysis using Flanders Interaction Analysis Category System. Twenty four women B.Ed. trainees were involved. Pretraining-posttraining observations revealed that the experimental group, after training in interaction analysis talked less, had higher $i/d$ ratios, and higher pupil initiation, than the control group.
Conclusion

Studies in classroom interaction have been initiated to understand teaching as it goes on in the classroom. Attempts have also been made to identify effective teaching behaviour patterns and modify classroom behaviour of teachers accordingly. The studies are sketchy within the broad framework of teaching. Concerted attempts involving imaginative research on teaching and teacher education is a pre-requisite to accomplish the goal of classroom instruction in the schools of the country today.