This paper explores criteria for judging teaching effectiveness in the language arts. The author argues that a number of studies have been concerned with viewing pupil-teacher interaction during instruction, but few have focused on this interaction during the teaching and learning of specific language arts lessons. There is a need for establishing relationships between interaction and pupil success. The author praises a recent study by Frizzi, utilizing and interrelating Mitzel's three classifications for criteria of teaching effectiveness (product—measure of student growth; process—social interaction of pupils and teachers; presage—such predictors as teacher traits and successes on paper and pencil tests, etc.). It is concluded that observation of specific teacher-student interactions during specific types of language arts lessons with some measure of achievement administered may be more useful for viewing teacher effectiveness in the language arts than vague evaluations undertaken in the past. (Author/DI)
Teaching effectiveness is a research area focusing on the interactions between students and teachers within the classroom setting in relation to student achievement.

In the past decade...research has begun to relate certain teacher behaviors to specific consequences in the climate of the classroom and in the academic achievement of pupils. The shift has been from subjective evaluations to a more objective counting of teacher-pupil interactions, using more sophisticated observation systems, and handling the larger quantities of data by taking full advantage of computer capability. Further discriminations and additional relationships now seem within reach as future research builds on present progress. (1)

As you have seen, however, there has as yet been little research relating teaching behaviors to class climate and academic achievement in the language arts area. Reading seems to have been a little more active than other facets of the language arts although that research is meager too. Nevertheless the construction of observation systems, including one in reading by Browne (2), seems to provide opportunities for studies relating teacher-student interactions to student achievement in each aspect of the language arts.

Mitzel's three classifications (3) for criteria of teaching effectiveness (product criteria, process criteria, presage criteria)

During the past decade, interest in teacher behavior has caused the proliferation of observation techniques and studies on both teachers and students in their interaction in a classroom. A number of studies (Flanders, Rosenshine, Medley, etc.) have been concerned with viewing pupil-teacher interaction during instructional sequences, but few have focused on such interaction during the teaching-learning of specific language arts lessons. Those that did, essentially in reading (Furst and Amidon, Harris, Browne), provided interesting insights but did not establish relationships between interaction and pupil success. There appears to be a need for language arts studies, such as a recent one by Frizzi, utilizing and interrelating Mitzel's three classifications for criteria of teaching effectiveness (product—measure of student growth; process—social interaction of pupils and teachers; presage—such predictors of teaching effectiveness as teacher traits and successes on paper and pencil tests, etc.).
Product criteria are the effects on students that are assumed to be the result of certain teaching behaviors. The effects are variously called student gain, student growth, or student changes. Process criteria are most often described and measured in the classroom situation; they involve the social interactions of students and teachers. Effective teaching is assumed to have taken place when the process leads to the achievement of certain definable and observable educational goals. Presage criteria are such teacher traits as intelligence, personality, success in answering test questions, etc., which are assumed to be predictors of effective teaching ability. Research in teaching effectiveness based solely on such variables has been characterized as "unrewarding and sterile" by Withal and Lewis. (4)

Actually the cautious optimism expressed by Flanders and Simon, at the opening of this paper, grew largely from their review of the few process-product studies which pointed to the generalization "...that the percentage of teacher statements that make use of ideas and opinions previously expressed by pupils is directly related to average class scores on attitude scales of teacher attractiveness,

*From this point on much of the discussion of the research is adapted from Chapter 2, Review of the Literature, in an unpublished doctoral dissertation by Richard John Frizzi entitled, "A Comparative Analysis of Student-Teacher Interaction During Episodes of Reading Instruction," Hofstra University, 1972.
liking the class, etc., as well as to average achievement scores adjusted for initial ability." (5) At this point in time we can look at a few studies in the field of reading which present somewhat diverse findings; the generalization formed above is sometimes supported.

In the CRAFT Studies by Harris and Serwer (6) and Harris, Morrison, Serwer, and Gold (7) the dimension of teacher approval and disapproval statements on student achievement were discussed. The studies had 48 first grade teachers as the first year sample and 38 second grade teachers in the follow-up second year of observations. The achievement dimension was measured by the Stanford Achievement Test at the end of first grade and the Metropolitan Achievement Test at the end of second grade. Both studies were conducted in New York City Schools with a student population categorized as disadvantaged.

In both studies strong disapproval and criticism was a significant negative correlate with disadvantaged children learning to read. However, the studies showed non-significant results when praise was used as a motivation to learning.

Soar (8) examined growth in reading comprehension and vocabulary as measured by the Iowa Achievement Test. The teacher variable studied was "...the degree of control exercised by the teacher, and the degree of warmth or supportiveness of the emotional climate." (9) On the basis of observation and analysis of behavior in a number of classrooms, four classes were selected as representing the extreme combination of conditions, namely, direct control, high hostility; direct control, low hostility; indirect control, high hostility; indirect control, low hostility. Soar hypothesized that both reading comprehension and
vocabulary would improve under conditions of indirect control and an atmosphere of low hostility. The hypothesis was not upheld for the results were significant only in the case of vocabulary development, but not for reading comprehension.

Chall and Feldmann (10) examined the teacher as a modifier of a reading method and examined the notion that a teacher's implementation of a particular method might be as important a factor in the reading achievement of pupils as the method itself. The investigators' exploratory study examined 14 teachers and their 12 classes (two teachers were replacements) in socially disadvantaged neighborhoods in New York City over a one year period. The investigators found that, with the use of an eclectic basal reader approach at first grade level, teachers did vary in their implementation of the method and that, "the observed practices were not related to those the teachers themselves report." (11)

The study incorporated special instruments to ascertain teacher stated approach and characteristics of their classroom practices and procedures. The achievement dimension was measured by the Stanford Achievement Test. The investigators also found that four teacher characteristics had a significant positive relationship to student achievement: teacher competence, a thinking approach to learning, appropriateness of the level of difficulty of the reading lessons, and a sound-symbol approach to teaching reading. Amount of approval or disapproval given during the lesson was not significantly related to achievement.

Frizzi (12) video taped a sample of 22 first grade teacher-student groups during instruction in phoneme-grapheme correspondence of the letter "p." The verbal behavior was analyzed through Flanders'
Interaction Analysis system.

No significant relationship existed between the percentage of students in the instructional groups who mastered the lesson objective and the interaction analysis groupings identified as percentage of teacher talk, percentage of student talk, I/D ratio (indirect to direct behavior), and content cross ratio. Similarly, no significant relationship was found between teacher characteristics of total years of experience, years of teaching within the district, or academic degree status. Significant correlations were found between student mastery and revised I/D ratio, teacher knowledge of reading content and techniques, and a teacher tendency to be more friendly, understanding, businesslike, systematic, stimulating, and imaginative.

No significant relationship existed between individual student mastery scores and the number of teacher-student verbal contacts, percentage of teacher questions, and percentage of teacher talk. Significant correlations were found between individual student mastery scores and I/D ratio and revised I/D ratio. When the factors of readiness and IQ were partialled, the correlations appeared independent of IQ but not independent of the influence of readiness.

The interaction analysis matrices demonstrated that teacher talk constituted approximately 66 percent of the total tallies recorded during the episodes, while student talk accounted for 24 percent, and silence and confusion accounted for the remaining 10 percent. Roughly 50 percent of the behavior focused on the lesson content. An I/D ratio of .84 indicated a teacher tendency to be more direct than indirect in
teaching, with a similar direct pattern (revised I/D ratio of .53) used for motivation and control. The major components of teacher talk were questioning, lecturing, and directives. Student talk was primarily response to teacher questions or directives.

The differences in behavior of the teachers identified as most effective and least effective showed that the most effective: 1) spent more time accepting students' feelings and accepting or using students' ideas, 2) generated more statements of praise and encouragement, 3) tended to lecture and give directives less, 4) showed less of a tendency to use criticism, and 5) permitted less student unsolicited talk. The least effective teachers were found to be twice as direct in teaching the lessons (I/D ratio of .58 vs .95) and twice as direct in their motivation and control of the students during the recorded episodes (revised I/D ratio of .29 vs .63). Teacher knowledge of reading was higher for the most effective group as was their tendency to be more friendly, understanding, businesslike, systematic, stimulating, and imaginative.

Browne (13) observed and recorded the student-teacher interaction in five first grade classes and four classes at third grade level all of which were using basal reader materials. The data were categorized according to the Flanders Interaction Analysis technique as well as the investigator constructed observational system called Focused Interaction Episode in Reading (FIER). A pilot study was also conducted using the same data with a third derived system called the Observational System for the Analysis of Primary Reading Lessons.

Browne's findings from the data categorized according to Flanders
showed that there were significant differences in teacher behavior while instructing low, average, and high groups. A trend was noted for the use of more direct control and criticism with low groups although the teachers did not use significantly less praise with the low groups. In all groups at both the first and third grade levels the teachers talked more than 50 percent of the time with a range of 37.5 to 66.4 percent. Student talk constituted about 30 percent of the verbal interaction but a large percentage of the pupil verbal behavior involved reading aloud.

It would seem that well constructed and focused observation scales particularly concerned with student-teacher interactions in the classroom while instruction is taking place might be valuable tools for future studies in the area of the language arts. Browne's Observational System for the Analysis of Primary Reading Lessons deserves further testing. Perhaps additional observation systems for other specific aspects of the language arts will be developed. At any rate the observation of specific teacher-student interactions during specific types of language arts lessons with some measure of achievement administered appears to have more promise for viewing teaching effectiveness in the language arts than vague evaluations of the past.
REFERENCES


