

Relationship of Time-on-task to Student Achievement

After reviewing over 50 studies dealing with the relationship of teacher behavior and student achievement, Rosenshine and Furst identified nine variables which were related to student achievement. One of these variables, student opportunity to learn or time-on-task, appears to have value "not only as a correlate of student achievement, but also as a covariate of pupil growth" (Rosenshine and Furst, 1973, p. 157). In a study comparing several "teaching methods" (e.g. lecture method, seatwork, group work, etc.), Anderson and Scott (1968) wrote that "teaching methods can be considered effective to the extent that students exhibit a high degree of involvement in learning" (p. 52).

In these kinds of studies, student involvement or time-on-task, is defined as the per centage of time the student is engaged in task-relevant behavior (e.g. 'eyes on' behavior, writing tasks, working with students, etc.). In Anderson's observational system (1976), the on-task behavior of each student was coded once every 90 seconds by trained observers. The observers scanned the room and recorded the category of the behavior the student was engaged in at the time. Per cent of time-on-task was estimated by dividing the number of behaviors coded as task-relevant by the total number of student behaviors coded (including all off-task behavior). In these studies the dependent variable, student achievement, is measured by a variety of instruments from standardized achievement tests to locally prepared criterion-referenced tests.

In four studies which used time-on-task as a dependent variable, correlations between that variable and student achievement ranged between .40 and .65. Lower correlations were found in longer studies (Lahaderne, 1968) and studies using

standardized tests (McKinney, 1975). Higher correlations were obtained with shorter studies (Cobb, 1972) and studies using criterion-referenced tests (Anderson, 1975).

Surprisingly, research using time-on-task as a dependent variable has just begun to appear in the literature. Both Rosenshine and Furst (1973) and Dunkin and Biddle (1974) feel that this variable will be valuable in studying correlates to student achievement.

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