In an earlier study, Tobias (10) found that elementary and junior high school teachers had significantly more positive attitudes toward terms describing traditional instructional devices, such as workbook and flashcard, than they did toward terms describing programed media, such as programed text and programed instruction. In turn, the programed terms were rated significantly more favorably than were labels also referring to programed instruction but stressing automation, such as teaching machine and automated instruction. It was also found that significant differences existed between essentially synonymous terms differing only in the degree to which they connoted mechanization, or automation. The data strongly suggested that teachers were biased against terms implying automation and indicated the possibility that teachers viewed such media as threatening to their role.

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Stolurow (8, 9) also found some suggestive evidence that teachers in training viewed teaching machines as threatening the teacher's role. Gotkin and Goldstein (3), on the other hand, found teachers and school personnel quite favorably disposed toward programed instruction. They report that "approximately 75 percent of administrators, teachers, and students were reported to be either 'favorable' or 'enthusiastic' [to programed instruction]. Less than 5 percent of each group were checked in the categories 'opposed' or 'strongly opposed'. . . . [Furthermore] fears engendered by the image of the 'teaching machine' are readily dispelled by active involvement with programed instruction" (p. 232). These findings were based largely on the local administrators' estimates of teachers' reactions. One can, of course, question the degree to which these reports represent teachers' opinions as opposed to those of the administration. In a study of 12 teachers, O'Toole (6) reported that his subjects had a positive view of the potential of programed instruction, and none of them saw themselves threatened by it.

An important caution regarding research in this area is made by Eichholz and Rogers (2). These investigators indicated that the real reasons for teachers' rejection of educational innovations are rarely given. It is thus pertinent to note that data based on teachers' reactions in the form of direct comments in this area may be less than accurate. One would expect that teachers, much like other groups confronted by the advent of automation, are likely to view with considerable unease new equipment described in terms associated with replacement of human workers by machines. Nonetheless, it would appear unlikely that teachers would state such a belief overtly in view of its possible conflict with professional goals. One might expect, however, that given the opportunity to state both their feelings toward such media and their views of the usefulness of these devices in comparative terms, teachers would systematically prefer equipment which poses less of a threat to their role. Finally, one would expect teachers familiar with the developments in the field of programed instruction—as compared to their less knowledgeable colleagues—to have more positive attitudes toward (and to view as more useful) equipment described by both programing and automated vocabulary.

The following specific hypotheses were formulated for Study I: