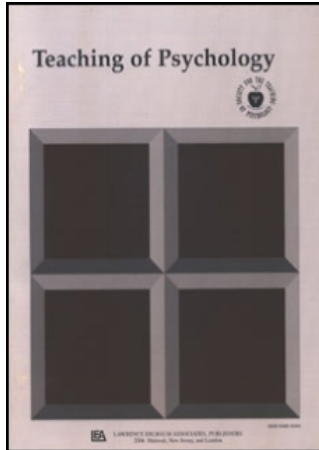


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## Teaching of Psychology

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### Effective Teaching: Facilitative vs. Directive Style

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exam) may be influenced by how an extrinsic factor (e.g., course grade) is contingent on such performance. The real question is how the use of "extrinsic motivators" may serve to subvert intrinsic interests and/or a "continuing motivation" to confront and perform in a given task area. In the present study, negative differential "intrinsic motivational" effects related to student course evaluations in the grade contingent versus the grade non-contingent condition were not demonstrated. Therefore, the present study produced results which supported the utilization of extrinsically manipulated grade contingencies as motivators of school learning and achievement while at the same time it demonstrated that extrinsically manipulated grade contingencies had no detrimental effects on intrinsic student interests.

Future studies should focus on such questions as how such grading practices (i.e., grade contingent versus grade non-contingent) may be differentially effective (as evidenced in performance, as well as "continuing motivation," and general learning attitudes) dependent on such factors as: (a) whether an "acceptable" grade level had been attained previous to the final; (b) the personality of the students. I would guess that the non-contingent grade condition should reduce evaluation anxiety and therewith increase the performance of some highly anxious students and at the same time lower the performance of other highly anxious students. Simultaneously, this same condition may

lower the performance of some of the highly motivated, "high need for achievement" students; (c) the differential values and/or goals of students taking the course. Incidentally, note in Table 1 a slight tendency for graduate and undergraduate subjects to perform differently under the two grade contingency conditions.

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### Note

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## Effective Teaching: Facilitative vs. Directive Style

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**Teachers emphasizing the role of  
facilitator-person produce students  
with greater interest in psychology.**

In a review of research on college teaching methods, McKeachie and Kulik (1975) pointed to the consistency with which methods emphasizing student participation resulted in greater effectiveness as measured by measures of retention, critical thinking, attitudes, and motivation for further learning. Examples are the studies by McKeachie (1951; 1954), Maloney (1956), Dawson, Messé, and Phillips (1972), and Morgan (Note 2).

The present study represented an attempt to integrate this generalization about student-centered teaching with the Mann *et al.* (1970) system of classifying teacher behavior in terms of the roles filled by teachers over the course of a term. Mann *et al.* described a teacher typology which included six identifiable teacher roles. They suggested that teachers may, at different points in the development of a class, emphasize one or another of these roles. Similarly teachers may differ from one another in the degree to which

certain roles are dominant over the course of a term. The four roles relevant to our purpose were: Teacher as (a) Expert, (b) Authority, (c) Facilitator, and (d) Person.

We hypothesized that instructors emphasizing the roles of Facilitator and Person would be more effective with respect to measures of student thinking, attitudes, and motivation than instructors emphasizing the roles of Expert and Authority, while the latter instructors would be more effective on measures of student knowledge. Mann suggests (personal communication) that these Expert and Authority roles are likely to be positively correlated across teachers as are the Person and Facilitator roles.

### Method

**Samples.** *Course sample.* The sample was drawn from the three introductory psychology courses given at the University of Michigan. The three courses are: "Psychology as a

Natural Science" (170), "Psychology as a Social Science" (171), and "Introduction to Psychology" (172).

**Teacher sample.** The teacher sample was made up of twenty-one teachers: two teachers from Psychology 170, eleven from Psychology 171, and eight from Psychology 172. One teacher was a professor with twenty-seven years of experience, two were senior psychology majors, and the rest were graduate students with none to four terms of teaching experience. Class size ranged from 16 to 31 with the typical class size being 20 to 25 students.

**Student sample.** The student sample was made up of 580 students, 291 of these being female. As one of the educational features of the introductory courses, students participate in research projects for three hours. Each project is screened to insure that the research offers educational benefits to the students. We utilized two hours of the students' time to give the attitudinal measures and criteria tests two weeks before the end of the term.

**Measures.** *Student measures.* The Introductory Psychology Criteria Test (Milholland, 1964) is a multiple-choice test designed to measure six levels of cognitive outcomes of an introductory psychology course: Interpretation, application, analysis of elements, analysis of relationships, derivation of abstract relations, and judgment by external criteria. Forty-eight items were chosen from earlier forms of the test for this study. In addition twenty-five item multiple-choice tests of knowledge were constructed for each of the three courses. Items were selected from the tests previously developed by Dyer (Note 1).

As a measure of motivation for further learning, students checked which of the advanced undergraduate psychology courses offered at the University of Michigan they would like to take. The score was simply the number of courses chosen. An Attitude Toward Psychology scale (Carrier, 1966) with 20 Likert-type items administered at the end of the semester to measure student attitude toward psychology. Student ratings of the value of the course and its impact on their learning were obtained as part of the scale for assessing student perception of teaching.

**Instructor classification.** Six meetings of each class were observed. Three research assistants acted as observers. Because of scheduling conflicts, some teachers were not observed by all of the observers. Instructors were categorized by the two prime observers into three groups: those emphasizing Facilitator-Person roles, those emphasizing Expert-Authority roles, and those falling between these two. Definitions of the roles given by Mann *et al.* were used to define the categories. Reliability of categorization for teachers observed by both observers was 0.9.

## Results

As shown in Table 1, an analysis of variance indicated that instructors classified as Facilitator-Person were more effective than other teachers in terms of student motivation for taking additional psychology courses. Other measures failed to show significant differences except that facilitative teachers also gave higher grades. This led us to suspect that the way to motivate students to take additional courses is to give high grades. At least in this sample, this suspicion is ill-founded. The correlation between mean grades and

**Table 1**  
**The Effects of Expert-Authoritarian vs. Facilitator-Person Teacher upon Student Performance**

Group	Number of Psychology Courses		
	Mean	SD	N
Expert-Authoritarian	14.01	10.35	134
Middle	13.88	10.17	145
Facilitator-Person	17.10	11.90	106
<i>F</i>		3.334	
<i>P</i>		.04	

mean advanced courses over all 23 sections of the course was  $-.19$ .

## Discussion

As we indicated in the introduction, this study fits with the theory developed in McKeachie (1954) suggesting that changes in motivation are facilitated by teaching that gives students an opportunity to express their own ideas and feelings. In terms of Lewinian theory, such teaching unfreezes previously held attitudes and allows influences from the group and from the teacher as a model to have an effect. The effect of the teacher as a model is enhanced if the teacher is seen as a person, rather than as an impersonal occupant of an instructional role. Thus instructors emphasizing person-facilitator role behaviors are particularly likely to affect student motivation.

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## Notes

1. Dyer, P. J. L. *Psychology 171, an evaluation of pass-fail grading and level of learning*. Unpublished thesis for Education Specialist, University of Michigan, 1970.
2. Morgan, G. *Effects of less prescriptive, student-centered college curriculum on satisfaction, attitudes, and achievement*. Paper presented at the meeting of the American Psychological Association, Honolulu, August 1972.
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