

A Comparison of Classroom Observations and Tutorial Experiences in the Preparation of Secondary School Teachers

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Introduction

A PREVIOUS study by one of the authors (Ingle and Robinson)¹ investigated the effects of school classroom observation of children coupled with college study of growth and development in comparison with college study only for teacher trainees. The literature reviewed at the time indicated general agreement that observation was valuable, but little evidence that demonstrated, empirically, the effects of observation experiences. Observation fell into the accepted fact area of functioning—that is, we should have observation because we know it is good.

The results of the aforementioned study indicated that although both groups made positive gains in their attitudes toward children (as measured by the Minnesota Teacher Attitude Inventory),² there was no significant difference between the groups either in attitude toward children or in factual knowledge about children (as measured by examinations administered during the course of the semester). Some subjective data were presented that indicated some positive effects related to the process of observation, but

these data must be recognized for what they were—subjective responses on the part of the experimenters accruing during the one semester of association with the students.

The results of the previous study raise some interesting questions about the implication of classroom observation for affecting the teacher trainees' attitudes toward children. Certainly it can be argued that classroom observation had no appreciable effect over college study and therefore should be discontinued. On the other hand, it might be argued that the study did not go far enough. The counter argument may be summarized in this way:

Classroom observation is a passive activity and, since attitude change seems most successful when the participants are active in the process, it is not surprising that there was no difference between the two groups. In order to effect a more positive change it would be necessary to arrange the situation so that the participants could become actively engaged with children.

Specifically, the preceding argument suggests that there might be a greater positive gain in attitude toward children if, rather

¹ Robert B. Ingle and Edward W. Robinson. "An Examination of the Value of Classroom Observation for Prospective Teachers." *The Journal of Teacher Education* 16 (4): 456-60; December 1965.

² Walter Cook, Carroll H. Leeds, and Robert Callier. *Minnesota Teacher Attitude Inventory—Manual*. New York: The Psychological Corporation.

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than passively observing children, teacher trainees were actively engaged in studying them in college. Further, because of the active participation with children, the college study might have greater personal meaning that would result in better knowledge of children.

It was the purpose of the present study to extend the previous study by investigating the suggestions raised above. Specifically, the following hypotheses were tested:

1. Observational experience coupled with college study will result in a positive gain in attitude toward children.
2. Tutorial experience coupled with college study will result in a positive gain in attitude toward children.
3. Tutorial experience coupled with college study will result in a significantly greater positive gain in attitude toward children than will observational experience coupled with college study.
4. Tutorial experience coupled with college study will result in a significantly greater gain in knowledge about children than will observational experience coupled with college study.

In the study, attitude toward children was measured by the Minnesota Teacher Attitude Inventory, and knowledge about children was measured by objective examinations. The level of significance chosen for the study was the 5 percent level.

Procedure

The subjects were the 92 college juniors in the School of Education at the University of Wisconsin-Milwaukee who were enrolled in two block-time classes in educational psychology. These courses represented the first courses in the School of Education for all the students.

Each block consisted of a course in introductory educational psychology with emphasis on the individual in the learning process, and a course in introductory growth and development. The courses were scheduled to meet three times a week. One block met for two hours in the morning (8:30 a.m. to 10:30 a.m.), the other block met in the

early afternoon (12:30 p.m. to 2:30 p.m.). The courses were taught by two different instructors, one instructor teaching both of the growth and development classes, the other instructor teaching both of the educational psychology classes. No attempt was made by the instructors to integrate the work of the two courses, although each class tended to supplement work normally covered in the other class.

It was not possible to randomize students within the blocks; whatever factors cause students to choose one time over another were allowed to operate freely. Some data were gathered in an effort to determine whether the composition of the two groups was similar or dissimilar. The initial Minnesota Teacher Attitude Inventory scores of the two groups were tested and found to be not significantly different ($p > .05$); thus there was some evidence that the two groups were comparable on this one aspect (attitudes toward children).

Sex distribution was checked and it was found that the morning section contained 60 percent females and 40 percent males, while the afternoon section contained 58 percent females and 42 percent males. All of the students were first semester juniors in secondary education. Of particular interest was the fact that there were no part-time students in either section nor were there any older students in either section. The age range in the morning section was 20 to 24 and in the afternoon section 20 to 25.

By flipping a coin, the instructors decided that the afternoon section would be the tutorial group. This group consisted of 52 students. Beginning the third week of the semester and continuing until the end of the semester, the students were assigned a two-hour weekly tutorial session, which took the place of the Wednesday class meeting, a total of 13 sessions. The students were assigned to four central city schools and were spread approximately equally among schools and over grades seven through twelve. The tutorial and observation sessions were limited to secondary schools because all of the students had signified an intention to teach at the secondary level.

The assignment of pupils for tutoring was made by the administrator of each school. The criteria used for assigning pupils for tutoring were (a) the pupils were experiencing academic difficulty but were not judged to be intellectually unable to comprehend the work nor to have any particular emotional difficulties that would seriously interfere with school functioning, and (b) the pupils were experiencing difficulty in an area of competency of one of the assigned tutors (usually either a major or minor teaching area).

Each tutor was assigned two pupils, one for one hour and one for the next hour. The tutors were directed to spend the first one or two sessions getting to know the pupils and trying to discover specific types of difficulty they were experiencing. The exact procedures to be used in tutoring were not specified; the tutors were merely directed to aid the students in any way they could, much as they might aid a younger brother or sister who was having difficulty with school work.

The tutors were encouraged to confer with the teachers of their pupils and the school records of the pupils were opened to them. The tutors were supplied books and all necessary materials by the schools.

Each of the tutors was required to keep a log on each of his pupils and to hand them in weekly. These logs were read by the instructors, commented upon where appropriate, and handed back to the tutors. The logs were not graded (which the tutors knew) but they were required. No organized attempt was made to discuss the logs in class, although if a tutor wished to bring up a point relevant to the observations, he was not discouraged. In general, class reference to the logs was relatively infrequent. The two remaining class sessions (Monday and Friday) were spent in lecture-discussions, clarifying and supplementing the regular course assignments.

The observers group, which consisted of 40 students, was assigned to the same schools over the same spread of grades. Each observer was assigned to two different classes. He was directed to focus his observation on the pupils in class and to keep a log of all activities. Each observer was encouraged to select one or two pupils in each class on whom he could concentrate his observational activity. The observers conferred with the teachers about the particular pupils they were observing; the school records of these pupils were open to the observer. There was, however, no contact between the observer and the pupils he observed. The logs and class activities for the observer group were handled exactly as were those for the tutor group.

At the first class meeting both groups were given the Minnesota Teacher Attitude Inventory (MTAI). This was administered again at the last class meeting. During the semester two objective examinations were given in the growth and development class. The examinations tended to stress factual material. The final examination in the growth and development class was also objective but tended to stress understanding and application of the concepts and principles involved, rather than merely factual knowledge.

Results and Discussion

Hypothesis one stated that an observational experience coupled with college study would result in a positive gain in attitude toward children. The difference between pre- and post-test for the observers was found to be significant, thus supporting hypothesis one. The findings are indicated in Table 1.

Hypothesis two stated that a tutorial experience coupled with college study would result in a positive gain in attitude toward children. The difference between the pre- and post-test for the tutors was not found to

	$\bar{X}$ Pre	s	$\bar{X}$ Post	s	Gain	t	Significance
Observers	27.72	28.53	42.05	26.81	14.33	2.32	< .05
Tutors	37.11	27.41	44.88	23.95	7.77	1.55	> .05

Table 1. Significance of Gains in Attitudes

be significant, thus the hypothesis was not supported. These findings are also indicated in Table 1.

Hypothesis three stated that tutorial experience coupled with college study would result in a significantly greater gain in positive attitudes toward children than would observational experience coupled with college study. The difference in mean gain between the two groups was not significant, nor was it in the direction predicted—the observers showed a greater, but not significant gain. Thus, hypothesis three was not supported. The findings are indicated in Table 2.

	Mean Gain	Difference	t	Significance
Tutors	7.77			
Observers	14.33	6.56	1.68	> .05

Table 2. Significance of Difference in Gains in Attitudes

Hypothesis four stated that tutorial experience coupled with college study would result in significantly greater knowledge about children than would observational experience coupled with college study. The differences for each examination were tested and found not to be significant. Thus, hypothesis four was rejected. The findings are indicated in Table 3.

The results of this study indicate that an observational experience will tend to improve the attitude of teacher trainees toward children (which supports the previous study), but that a more intimate experience, the tutorial experience, does not significantly improve the general attitude toward children. The latter finding is of particular interest since the previous study indicated that college study alone did significantly improve attitude toward children. It would appear that any positive effects of studying children

in college were counterbalanced by negative effects related to the tutoring experience.

It would appear that rather than making the individual more permissive toward children, an intimate contact with children tends to sustain the level of permissiveness originally held. It would seem reasonable to speculate that working closely with pupils who have academic problems may result in a more realistic appraisal of the teaching-learning situation, particularly as to the problems that can be generated by the pupils, and thus generally affects what would be an increase in permissiveness gained through merely studying and/or observing children. This is borne out somewhat by the fact that the mean scores for the MTAI drop from graduating education seniors to experienced teachers. Teachers apparently find that the demands of pupils in the classroom are such that it is difficult to maintain as high an attitude of permissiveness as is maintained by those who have no classroom experience. Something of the same may have been operating with the tutors.

An informal analysis of the logs of both groups indicated that the tutors maintained a higher level of enthusiasm for their task than did the observers. Informal polling of the students indicated that, although both groups felt that the experience was valuable, the tutors felt that they had a much better concept of what teaching was like than did the observers. The advantages of these types of gains may far outweigh any increase in permissiveness of attitude, which may be spurious since, as mentioned previously, the level of permissiveness drops from education seniors to experienced teachers. For these reasons the authors feel that it would be unjustified to conclude from the results of this study that a tutoring experience is less valuable than an observational experience.

Since the present study grew out of a

	Tutors	s	Observers	s	Difference	t	Significance
Exam One	25.92	2.78	25.59	2.72	.33	.57	> .05
Exam Two	29.35	2.38	28.68	2.12	.67	1.43	> .05
Final Exam	52.44	5.19	51.66	5.30	.78	.74	> .05

Table 3. Mean Scores on Objective Examinations

previous study, it was decided to compare the results of the two studies, if possible. The pre-test results on the MTAI were tested and found not to be significantly different; therefore it was decided to compare the gain scores across both groups. It must be emphasized that these studies were done a year apart and that no hypotheses were generated. Therefore all that could legitimately be done was to examine the results, comment upon them, and indicate what hypotheses might be derived from them. The results of the comparisons are found in Table 4.

	Gain Score	Difference	t	Significance
Observers I	29.85	15.825	3.36	< .05
Observers II	14.025			
Observers I	29.85	22.08	4.73	< .05
Tutors	7.77			
Class Study	23.17	9.145	2.20	< .05
Observers II	14.025			
Class Study	23.17	15.40	3.56	< .05
Tutors	7.77			

Table 4. Comparison of Gain Scores
Between Two Studies

It is obvious that in all cases the subjects in the first study showed significantly greater gains than did the subjects in the second study. In addition to the treatment difference, another variable may account for the greater gains for the subjects in study one. The variable was that of difference in placement. The subjects in study one were placed in suburban schools, the subjects in study two were placed in central city schools.

Assuming that the classroom climate will have an effect on the observers, it is not surprising to find that greater permissiveness is developed by observers in a situation where more permissiveness is likely to exist. The class study group, since they dealt only theoretically with children, were free to develop a more permissive attitude unhindered by any actual experience. The possible effect of tutoring has been discussed elsewhere. How much the difference in population might make is not suggested by the data.

Again it must be stressed that the above

suggestions for obtained differences are, at best, problematical. There is a suggestion that the type of school or population makes a difference. Obviously in order to conduct a more rigorous test an appropriate situation should be set up where more appropriate comparison could be made. This would most particularly apply to the tutorial situation.

Summary and Conclusions

Fifty-two students in a block-time course in educational psychology were released from class once a week to serve as tutors, on an individual basis, for selected high school students of central city schools. Forty students in another section of the course were released for observation of classes only, in the same schools.

Pre- and post-tests, using the MTAI, indicated a significant gain in attitudes for the observation group, but not for the tutorial group. The difference in mean gain between the two groups was not significant. Comparisons between objective examinations given during the course of the semester and between final examinations for the two groups revealed no significant differences between groups in knowledge gained.

Results from a questionnaire, administered as a post-test only, revealed that while students in both groups expressed a greater awareness of the problems in central city schools, and an increased sympathy for the children, they tended to concur in the opinion that highly experienced teachers, rather than beginning teachers, were needed to cope with the apparent problems. It was concluded that while observation experiences tended to improve the measured attitudes of teacher trainees toward children in central schools, the tutorial experience, considered to be the more intimate experience, did not significantly improve measured attitudes toward children in the same schools.

The investigators call attention to the suggestive findings from the questionnaire as having particular relevance for further study in the preparation of teachers for central city schools. □

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