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**TEACHER BEHAVIOR RATINGS AS A CRITERION
OF TEACHER EFFECTIVENESS**

by

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INTRODUCTION

It seems to be a matter of common agreement that there exists a need for some adequate measures which might be used as criteria of teaching effectiveness. This need and its recognition have produced a number of discussions of the problem in the literature, such as that by Ryans (5) and by Orleans, et. al. (4). It has also led to the unprecedented action of the American Educational Research Association which appointed a special committee to investigate the problem of setting up criteria in this area (3). The importance of this problem and the evident inadequacies of existing instruments for this purpose have led to a number of attempts to devise procedures which would serve the purpose more adequately.

In his analytic discussion of criteria of teaching effectiveness, Ryans (5) indicated that criterion measures should be one of two types: (1) observation of the teacher, and (2) observation of the product of the teacher's efforts, the pupils. The latter referred to the "pupil gain" criterion, and has usually been measured by achievement tests. With existing tests, however, it seemed to be limited to the measurement of subject matter learning and study skills and to provide no means of measuring pupils' progress toward a number of other important educational objectives of a less tangible nature. Since it seemed obvious that the learning of the students is, at least in part, the effect of the teacher's behavior, the first approach appeared to offer a better and quicker way of developing measures of teacher effectiveness in these non-subject-matter areas.

The purpose of this study was, therefore, taken to be the development of procedures to provide measures of some of these intangible aspects of learning in the classroom, through the observation of teacher behavior. It was assumed that the behavior of the teacher plays an important part in setting the stage for learning through its effect on the social and psychological climate of the classroom. This would mean that these teacher behaviors were assumed to determine to a considerable degree the amount and quality of student learning.

The purpose of the study thus became, more specifically, to develop rating procedures to provide judgments of those teacher behaviors which were thought to be related to the development of good pupil-teacher relations, the learning of cooperative, democratic ways of working together, and the development of habits leading to good mental health. The aim was to develop a set of observer rating scales that would have the following characteristics: (1) the variables to be rated would be psychologically meaningful and relevant to possible educational objectives, (2) each scale would include a single variable, the nature of which would be unambiguous, (3) the ratings would possess some degree of reliability, in the sense that the results obtained from different observers should be relatively consistent, (4) the scales should be usable by professional educators and psychologists without requiring an undue amount of special training and experience in the use of these particular scales, and (5) the scales should be relatively free of values in order to make them useful in a wider variety of situations than would be the case if values were made a part of the scales.

The Rating Scales

The project began with the preparation of a list of some thirty kinds of teacher and pupil behaviors that were thought to be of some significance in a specification of classroom climate and which were thought to affect the learning process. Many of these were modifications of the behaviors of parents listed in the Fels Parent Behavior Rating Scales (1), and were based on the thought that parent behavior and teacher behavior have much in common. Others were added which seemed appropriate in the group work situation of the classroom and in the particular relations of children to their teachers. All were based on the notion that differences in the achievement of different classrooms are due to real differences in the teachers. It was felt that these differences could be observed. They were also based on the belief that the achievement and growth of the student is affected by such classroom characteristics as warmth, acceptance, permissiveness, consistency of teacher behavior, opportunity for cooperative group activity, competitive pressures, absence of fear and tension, etc.

This list of behaviors was then used in making up a set of rating scales patterned after the Fels Parent Behavior Rating Scales (1). Each scale was presented on a separate sheet of paper, and included a definition of the behavior to be rated, descriptions of the behavior at various points along the scale, the (graphic) rating scale, and spaces for the score and identifying data. With the addition of a validity scale this gave a total of thirty-two scales. (For the variables and their definitions see the copy of the scales, Appendix A.) In using the scales the rater was instructed to indicate two things: (1) his rating, and (2) the limits within which he would consider another rating as being essentially in agreement with his rating. His rating was indicated by marking the line scale at the point corresponding to his judgment. The score based on this rating was simply the distance of this mark in millimeters from the base line. The "tolerance limits" were also recorded in millimeters. These "raw scores" formed the information for the subsequent analyses and evaluation of the scales.

Procedures

The scales were then tried out by two observers in nearby elementary schools. After a short period of preliminary training in class observation, the two observers visited nineteen classrooms in the public schools of central Missouri and six classrooms in the University Laboratory School (University of Missouri). In every case the observers visited the classrooms together. The usual procedure was for the observers to take seats in the rear of the room and to remain as unobtrusive as possible. During the observation period they made notes on the activities observed, incidents which occurred, and observations of the relationships between the teacher and the students. The observation period typically lasted for about one hour. The ratings were usually made later in the day from notes made during the observation. Where possible, the observers also made notes on the rating scales of the kinds of behavior observed which they believed had influenced the rating.

It had been intended to repeat this series of observations in order to check on the stability of the behaviors rated-- to get a test-retest reliability measures on the scales. Due to the approach of the end of the school year this was not possible.

Of the twenty-five classrooms visited, four presented the observers with situations where the regular teacher had yielded temporarily to a specialist teacher in one case and to practice teachers in the others. Since it was felt that in these situations the regular patterns of classroom relations were markedly disrupted, these classes were excluded in making the analysis of the scales. This left data on twenty-one classrooms.

Results

One requirement that should be met in devising scales of this kind for the use of observers is that when a given situation is observed and rated there should be at least some degree of agreement between the ratings of the observers. The lack of such agreement would point out the inadequacy of the scale, the need for either revision or abandonment of that scale. The first analysis of the data of this investigation was aimed at testing the scales against this requirement. The results of the analysis are given in Table 1, which gives the means and standard deviations for each rater on each scale and the correlation between ratings of observers on each scale.

Examination of Table 1 indicates that there were a number of scales on which there was little or no agreement between the ratings of the two observers. In three cases the correlation between ratings of the observers was negative. Since these correlation coefficients are, in a sense, reliability coefficients, it is important that they be high enough to indicate at least some reliability. Taking a correlation of about .50 (r of .49 is significant at .01 level, one-tailed test) as an arbitrary minimum to satisfy this requirement eliminated all but twelve of the thirty-two scales. This meant that twenty scales needed to be drastically revised or to be discarded. Presumably, minor revisions would be sufficient for the twelve scales that had survived this requirement.

TABLE 1

COMPARISON OF OBSERVER RATINGS ON 32 CLASSROOMS

Scale	Observer A		Observer B		Inter-observer correlation
	Mean	SD	Mean	SD	
1. Adjustment of Classroom	56.1	13.0	60.3	13.5	.41
2. Activeness of Classroom	59.5	17.3	57.7	8.7	.75
3. Discord in the Classroom	43.0	13.8	46.8	10.2	.13
4. Coordination of Classroom	61.3	9.6	57.1	11.5	.71
5. Student-Centeredness of Classroom	58.0	18.5	53.8	13.5	.08
6. Intensity of Contact	60.9	15.7	51.2	11.4	.22
7. Restrictiveness of Regulations	53.5	15.1	52.4	12.3	.66
8. Readiness of Enforcement	49.4	9.5	51.4	8.5	.36
9. Severity of Actual Penalties	36.0	8.7	42.7	11.6	.06
10. Justification of Disciplinary Policy as Presented to Child	42.5	8.5	51.4	9.7	.35
11. Democracy of Regulation and Enforcement Policy	32.0	10.9	49.0	14.1	.21
12. Clarity of Policy of Regulations and Enforcement	56.4	7.6	54.1	12.0	.51
13. Effectiveness of Policy of Regulations and Enforcement	59.9	10.6	56.0	13.3	.79
14. Disciplinary Friction	32.6	12.1	41.1	11.9	.35
15. Quantity of Suggestion	65.5	11.7	64.8	11.5	.21
16. Coerciveness of Suggestion	66.0	10.6	56.6	13.8	.34
17. General Babbling	49.0	13.3	49.4	13.1	.13
18. General Protectiveness	62.0	6.9	46.7	10.7	-.21
19. Readiness of Criticism	60.2	13.9	52.4	13.4	-.24
20. Direction of Criticism	54.5	10.1	46.1	13.2	.50
21. Readiness of Explanation	47.0	20.0	54.4	10.6	.57
22. Solicitous for Student Welfare	30.8	8.9	39.5	11.2	.15
23. Acceptance of Students	56.5	15.8	48.6	16.0	.51
24. Emotionality	37.6	11.6	38.7	8.8	.45
25. Understanding	55.8	12.3	51.7	14.3	.67
26. Rapport Between Teacher and Students	60.6	14.5	47.2	15.2	.53
27. Affectionateness	62.0	10.7	49.6	13.5	.69
28. Intra-Group Activity	70.1	9.6	68.6	9.1	.48
29. Group Action	28.6	12.4	39.3	12.2	.18
30. Acceleration	50.2	9.3	54.6	10.2	-.16
31. Validity	46.6	13.5	44.2	14.0	.62
32. Teacher Approach to Students	65.3	13.7	57.2	12.4	.44

At this point the analysis was split into two parts: (1) the further study and analysis of the data to aid in a better understanding of what the scales were and how they related to each other, and (2) the (subjective) re-examination and revision of the scales. A summary of the results of work in these two parts follows in the order given above.

Part 1. A complete matrix of intercorrelations was obtained for the ratings of each observer (Tables 2 and 3). Two attempts were then made to determine in what manner the variables tended to cluster together.

The first of these was performed upon the intercorrelations of the twelve variables which had been found to possess some degree of reliability (as defined by inter-observer agreement). The procedure for the determination of a cluster consisted of inspecting the inter-correlations and selecting those variables which correlate highly with each other and little or not at all with the other variables. Use of this procedure revealed what appeared to be two clusters (Tables 4 and 5).

TABLE 2
INTERCORRELATIONS OF RATINGS OF OBSERVER A*

Variable	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18**	19	20	21	22**	23	24	25	26	27	28	29	30	31	31		
1. Adjustment of Classroom	30	-22	08	36	15	-06	-11	.03	58	30	26	27	-33	-30	-26	06	29	43	59	42	-18	55	46	35	-21	13	-17	-28	-45			
2. Activeness of Classroom	31	-26	32	46	-7	-34	16	13	00	-05	-09	19	-02	-05	27	06	30	38	35	37	51	81	73	58	04	10	-7	10	-13			
3. Discard in the Classroom	-19	-15	03	03	-27	06	-41	-25	-14	-34	64	-14	02	23	02	-07	-10	02	-07	-15	56	09	21	28	08	-10	16	-15	00			
4. Coordination of Classroom	-40	-34	14	49	-21	-12	-36	54	60	-05	24	04	-87	48	-12	16	-37	23	44	-48	61	-08	14	51	-25	53	75	-50	64	-44		
5. Student-Centeredness	85	-46	-43	29	44	20	45	-41	05	-23	-42	46	25	36	26	25	36	26	25	25	53	75	-50	64	-44	-23	-64					
6. Intensity of Contact		-05	-47	25	23	30	-19	-31	11	13	-16	51	24	18	16	21	-04	25	41	71	-09	21	-14	-01	-33							
7. Restrictiveness of Regula.		28	-01	-64	-61	13	13	13	62	35	-29	06	-49	-64	08	-52	18	03	-52	-40	-60	-51	49	54	16							
8. Readiness of Enforcement		-02	07	02	27	66	27	25	25	-25	-13	-32	-13	-06	-08	-15	-21	-64	-05	08	01	06	16									
9. Severity of Penalties		-02	-15	05	-21	16	17	22	-19	02	-19	-04	-01	-01	-04	-01	-11	-18	12	17	-11	03	00	-30	-28							
10. Justification of Policy		70	-05	19	-43	-2	-19	02	22	26	47	22	33	12	41	17	-47	39	-29	-40	-24											
11. Democracy of Policy		-22	04	-53	-36	-37	25	-02	16	17	00	-10	32	-08	-17	31	-18	-27	19	-34	20	07	57									
12. Clarity of Policy		-45	33	14	-31	19	-06	05	-01	-09	11	-22	-37	03	-28	31	-10	18														
13. Effectiveness of Policy		56	-11	04	00	09	-11	-14	05	43	16	30	16	03	09	13	-11															
14. Disciplinary Friction																																
15. Quantity of Suggestion																																
16. Coerciveness of Suggestion																																
17. General Babying																																
**18. General Prote-iveness																																
19. Readiness of Criticism																																
20. Direction of Criticism																																
21. Readiness of Explanation																																
**22. Solicitous for Welfare																																
23. Acceptance of Students																																
24. Emotionality																																
25. Understanding																																
26. Rapport																																
27. Affectionateness																																
28. Intra-Group Activity																																
29. Group Action																																
30. Acceleration																																
31. Validity																																
32. Teacher Approach																																

* Decimal points have been omitted.

** Intercorrelations were not computed for Variables 18 and 22 as Observer A did not rate all teachers on these variables.

TABLE 3
INTERCORRELATIONS OF RATINGS OF OBSERVER B*

Variable	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32					
1. Adjustment of Classroom	27	-75	56	58	26	-33	12	-16	73	81	56	71	-67	-02	-26	-07	32	-28	76	64	32	68	-61	-4	85	58	-09	17	-09	-38	-42					
2. Activeness of Classroom	18	-02	36	69	-51	03	-18	37	42	-11	02	03	-26	-17	01	47	04	43	58	50	82	04	7	54	87	-33	40	26	-11	-83						
3. Discard in the Classroom		-48	-43	-21	23	-31	11	-58	-51	-53	-78	67	-08	07	-23	-36	08	-60	-43	-49	-44	44	4	-41	-36	00	-27	00	18	22						
4. Coordination of Classroom			21	-04	15	57	34	47	01	88	74	-61	28	22	-17	38	-10	33	16	14	16	-58	16	06	08	32	-04	39	-33	-09						
5. Student-Centeredness				66	-24	17	08	46	44	23	37	-25	-01	-15	12	18	01	35	58	22	49	-26	32	54	39	-11	56	45	-12	-51						
6. Intensity of Contact					30																															
7. Restrictiveness of Regul.																																				
8. Readiness of Enforcement																																				
9. Severity of Penalties																																				
10. Justification of Policy																																				
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29. Group Action																																				
30. Acceleration																																				
31. Validity																																				
32. Teacher Approach																																				

* Decimal points have been omitted.

The first cluster included eight variables (Tables 4 and 5):

2. Activeness of Classroom
7. Restrictiveness of Regulations (negative relationship)
20. Direction of Criticism (Approval)
21. Readiness of Explanation
23. Acceptance of Students
25. Understanding
26. Rapport between Teacher and Students
27. Affectionateness

This cluster was tentatively called the "warmth" cluster since all the variables seem to indicate the establishment of a comfortable and pleasant relationship between the teacher and the students.

The second cluster contained three variables (Tables 6 and 7):

4. Coordination of Classroom,
12. Clarity of Policy of Regulations and Enforcement,
13. Effectiveness of Policy of Regulation and Enforcement.

This appears to be a "stability" or "maintenance of order" type of cluster, since all the variables appear to indicate the presence of efficiency and planned organization of the classroom.

One variable of the twelve, 31. Validity, did not enter either of the two clusters. This variable was designed to indicate the extent to which the presence of the observers in the classroom altered the climate and conduct of the class.

The second analysis made of the way in which the variables cluster together was performed in the same way on the complete set of intercorrelations of the ratings made by Observer B. Although more confusing because of the larger number of variables involved, the results of this second analysis appear to be very similar to those obtained in the first analysis. The largest and clearest cluster again appears to be a type of "warmth" cluster and includes all the variables assigned to that cluster in the first analysis. In all, the cluster contained twenty-two variables. The variables assigned tentatively to this cluster with positive loadings were:

1. Adjustment of Classroom
2. Activeness of Classroom
5. Student-Centeredness of Classroom
6. Intensity of Contact
10. Justification of Disciplinary Policy as Presented to the Child
11. Democracy of Regulation and Enforcement Policy
20. Direction of Criticism (Approval)
21. Readiness of Explanation
23. Acceptance of Students
25. Understanding
26. Rapport between Teacher and Students
27. Affectionateness
29. Group Action

The variables assigned to this cluster with negative loadings were:

7. Restrictiveness of Regulations
9. Severity of Actual Penalties
15. Quantity of Suggestion
16. Coerciveness of Suggestion
19. Readiness of Criticism
23. Intra-Group Activity
30. Acceleration
31. Validity
32. Teacher Approach to Students

Table 4

Intercorrelations of Variables of Cluster I for Observer A

Variable	7	20	21	23	25	26	27
2. Activeness of Classroom	-.17	.38	.35	.37	.61	.73	.58
7. Restrictiveness of Regul.		-.49	-.64	-.52	.03	-.52	-.40
20. Direction of Criticism			.46	.67	.33	.63	.60
21. Readiness of Explanation				.39	.34	.64	.29
23. Acceptance of Students					.64	.61	.60
25. Understanding						.47	.51
26. Rapport							.64
27. Affectionateness							

Table 5

Intercorrelations of Variables of Cluster I for Observer B

Variable	7	20	21	23	25	26	27
2. Activeness of Classroom	-.61	.43	.56	.62	.47	.53	.67
7. Restrictiveness of Regul.		-.58	-.58	-.83	-.59	-.65	-.80
20. Direction of Criticism			.80	.79	.59	.83	.73
21. Readiness of Explanation				.82	.83	.89	.85
23. Acceptance of Students					.78	.89	.88
25. Understanding						.83	.82
26. Rapport							.86
27. Affectionateness							

Table 6

Intercorrelations of Variables of Cluster II for Observer A

Variable	4	12	13
4. Coordination of Classroom		.54	.60
12. Clarity of Policy			.62
13. Effectiveness of Policy			

Table 7

Intercorrelations of Variables of Cluster II for Observer B

Variable	4	12	13
4. Coordination of Classroom		.68	.74
12. Clarity of Policy			.83
13. Effectiveness of Policy			

The second cluster obtained in this analysis of the ratings of Observer B appears to be the same as the second cluster obtained in the first analysis. It contains the same variables and appeared to be a "stability" or "maintenance of order" cluster. It contained four variables:

- 4. Coordination of Classroom
- 12. Clarity of Policy of Regulations and Enforcement
- 13. Effectiveness of Policy of Regulation and Enforcement
- 8. Readiness of Enforcement

This more complete analysis was not done on the intercorrelations of the ratings of Observer A. Although there were some differences and the correlation coefficients of Observer A were in general smaller, it was observed that they tended to follow the same general pattern as those of Observer B.

It would seem that the results of these cluster analyses are essentially in agreement with the factors reported recently by Ryans (6) in his study of teacher behaviors in the elementary school. Ryans found five oblique factors which he described as: A, Originality, adaptability and tolerance; B, Businesslike vs. disorganized, irresponsible approach; C, Understanding, fair vs. unfriendly, domineering; D, Sociability; and E, Appearance. The second cluster found in the present study, the "stability" or "maintenance of order" cluster, seems to be much like Ryans' factor B, Businesslike vs. disorganized, irresponsible approach. The first cluster, the "warmth" cluster, appears to correspond to Ryans' factors A, C, and D. It would not be unreasonable to suppose that with a larger number of cases and with the more rigorous procedures of factor analysis, this "warmth" cluster might yield several factors of the type indicated by Ryans. Since the present study included no scales dealing with teacher appearance, no clusters could be expected to correspond with Ryans' factor E.

In the course of the preceding analyses a phenomenon was observed that appeared not to be directly related to the main investigation, but which appeared to be both important and interesting. In a number of cases it was observed that the raters had disagreed on the ratings to be assigned teachers on a pair of scales, i.e., the correlation between raters was low. Yet when correlations were run between the scales (for each rater) the scales were found to be related. Take the following combination, for instance:

Variable	5	6
5	.08(a)	.65(b)
6	.66(c)	.22(d)

In this case (a) and (d) are correlation coefficients representing the degree of inter-observer agreement; (b) is the correlation between the two scales based on ratings of Observer A; and (c) is the correlation between the two scales based on ratings by Observer B. What was the meaning of this sort of thing? Does it indicate a prestructuring of the phenomena of the classroom in the minds of the observers as suggested as a possibility by Ryans (6)? And that cluster or factor analysis reveals only the structure of a part of the observer's value system? Or is it merely evidence of the presence of the "halo" effect? No answers to these questions could be found in the data at hand.

Part 2. The evidence on scale reliability given above indicated the necessity of reviewing and revising many of the rating scales that had been constructed and tried out. At least twenty of the scales needed to be revised to make them more reliable before further work with them could be justified. The scales were, therefore, re-examined with special attention to those on which the agreement of the observers was low. This reconsideration resulted in the discovery of several characteristics of some of the scales that may have been contributing to this lack of reliability.

In the first place, there were a few scales which the observers felt could not be used because the observation period provided no opportunity to observe the behavior with which the scale was concerned.

In these cases one observer refused to make a judgment, the other made ratings which were in the nature of predictions of what the teacher's behavior would be in that kind of situation. This was noticeably true for scales 18, General Protectiveness and 22, Solicitous for Student Welfare.

Second, it became more apparent that a number of the scales were not confined to a single, unitary dimension; that some scales included two or more kinds of behavior that were not necessarily closely associated. This was found to be true of even some of the scales that showed a satisfactory degree of inter-observer agreement. For example, scale 2, Activeness of Classroom, was composed of elements of activity and of tension. Scale 5, Student-Centeredness of Classroom, was built around the notion of meeting student needs. But observation indicated that the teacher, rather than ignoring student needs, was usually sacrificing some needs for others. This brought up the question of who is to define student needs--should the ratings be made on the degree to which the teacher is meeting the student needs as defined by the school board, the teacher, the pupil, or the observing psychologist? On scale 15, Quantity of Suggestion, one rater assigned two values to one teacher. The teacher was giving many detailed suggestions at some times (especially in initiating student activities), and in other phases of the activities was avoiding making any suggestions. Did this indicate the need for more than one scale, with each devoted to a particular kind of activity in the teaching process? Scale 21, Readiness of Explanation, included both explanation of the assigned topic and explanation of "irrelevant" subjects brought up by the students. Teachers often differed in readiness to explain these different kinds of topics. On scale 28, Intra-group Activity, there was apparently some confusion as to whether to rate on the basis of "planned" interactions or "casual" interactions, or both. There were other scales for which experience and data indicated the need to split the scale into two or more additional scales for one reason or another, but the ones mentioned are perhaps typical.

Third, many scales appeared to need a more explicit definition of the behavior to be observed and of the points on the scale itself. It was discovered that the two observers had tended to base their ratings on different kinds of observed behavior: one rated as much as possible on the basis of student behavior, the other tended to prefer to observe and rate the behavior of the teacher. Insofar as the scales allowed these differences in the approach of the observers to the rating situation, the scales were at fault. It was felt that this was also contributing to the lack of agreement between the ratings of the two observers.

Another problem arose in connection with the question of values. The attempt had been made to construct scales that would be relatively free of value considerations with the idea that values could be applied later by persons using the scales. However, it became evident that the scales varied in the effects produced by this process of attaching values. Some of the scales survived the process rather well, the attachment of values resulting in the highly valued activity falling at an extreme of the scale. But many became "double-ended" or curvilinear when values were attached, with both extremes representing undesirable conditions and the most highly valued activity falling somewhere within the scale.¹ This observation posed a problem that should have been foreseen and worked out ahead of time if the scales were to be of practical use.

This insertion of the problem of values and educational objectives forced a reconsideration of some of the assumptions underlying the whole research project: the nature and relevance of educational objectives, the general nature of any criterion, and the relations of both of these to any proposed criterion measures.

In summary, then, at this point it was seen that most of the rating scales were unreliable in use although the cluster analyses indicated that they were tapping some of the kinds of variables that many have considered to be important. A review of the scales indicated a number of ways in which they might be improved so as to increase their reliability. However, it was also discovered that the application of value judgments to the scales (a step necessary if they were to be used as criteria) led to a situation which would be very inconvenient in the analysis of results when the scales were used as criterion measures. Thus the problems of reliability and practicality forced a reconsideration of the whole criterion problem in the effort to find a means of re-casting the
1. We would like, at this point, to thank Dr. Kenneth B. Brown for bringing this matter to our attention.

measuring instruments into a form that would be reliable and that could handle in some way the values that must eventually be attached to the measurements.

A Reconsideration of the Problem

After a considerable amount of reading and thinking about these questions it became increasingly apparent that this type of approach to the criterion, popular as it may be, has some serious drawbacks from a theoretical standpoint. Educators seem to be in agreement on the whole, on the ultimate objectives of education, and therefore on the ultimate criterion which may be taken to be the student's performance in later life (3). Since the ultimate criterion is not one on which measures can readily be gained, it becomes necessary to resort to some type of intermediate criterion measures. Accordingly, they have had recourse to such things as measures of pupil achievement, ratings of teacher behavior, tests of qualities presumed to be associated with teaching effectiveness, and the teacher's record as a college student (2). At the present time the first two of these are the only ones that appear to be considered seriously as criterion measures (3, 5, 7). The present study began with the object of developing improved measures or instruments for the rating of teacher behavior. It is now seen that the project ran into difficulties. It could not have been otherwise. An intermediate criterion measure, to be useful as a criterion measure, must be related to the ultimate criterion (8). This relationship must often be assumed. The question in this study became, then, one of how large an assumption should be made. For such measures as those of pupil achievement the assumption of relevance to the ultimate criterion can be made easily--it seems reasonable to assume a relationship between what a student learns now and what his behavior will be when he leaves school. The same assumption cannot as readily be made about the relation between what the teacher does and what the student does in later life. In the first place, this assumption requires one more "jump" from the ultimate criterion than does the "pupil gain" criterion. In the second place, it has been repeatedly observed even by those advocating its use, that a teacher behavior criterion is faced with certain serious problems (2, 3, 4, 8). Different teachers showing what appears to be the same behavior get different results from the student. It appears that different students react differently to the teacher exhibiting this behavior. It has also been noted that teachers showing different behaviors sometimes attain similar results. In other words, to predict student outcomes from teacher behavior would require a combination (the nature of which has yet to be demonstrated) of teacher personality (specific traits unknown), teacher behaviors (unknown), and the special situation in which the teaching is done (the significant variables in this situation are also unknown)². The evidence is clear. It is utter folly to continue to assume a simple relationship between simple teacher behaviors and the ultimate criterion of education. The attempt to develop an adequate measure of teacher behaviors for use as a criterion measure has, therefore, been abandoned.

Plans for Future Research

The purpose of this project, the development of measures of some of the intangible aspects of learning in the classroom, will be retained. But the attention will be shifted from the behavior of the teacher to the behavior of the students in the class. Experience of the project staff and of others indicates that a great deal can be learned from the observation of students (8). If a device could be developed to help the observer see and report the student behaviors in the classroom, and to help him organize these observations according to their meanings, the result would be a measuring device that would fall into the same category of criterion measures as does the "pupil gain" criterion, which, as indicated above, does not require assumptions that are too remote or which are contrary to fact. The goal of this part of the project, then, will be to produce an illustrative device of this sort and to try it out.

What seems to be indicated as necessary in such an instrument are the following: (1) emphasis on student behavior, (2) specific behavior descriptions, (3) definite provision for application of values to the scales, and (4) a format which would be not too time-consuming. The project staff

2. A formulation similar to this one was presented by N. L. Gage at the 1953 Convention of American Personnel and Guidance Association, Chicago, April 1, 1953.

is now engaged in the development of such an instrument.

Summary

1. An attempt was made to formulate a series of teacher behavior rating scales which would serve as criterion measures in the study of teaching effectiveness.

2. The scales were tried out by two observers in twenty-one elementary school classrooms. The results showed some degree of reliability (inter-observer agreement) for twelve of the thirty-two scales. Three possible reasons for the unreliability of the remaining scales were presented: (a) the attempt to rate behavior that occurred too infrequently, (b) inadequate specification and definition of behaviors to be rated, and (c) permitting the observers to base their ratings on the observation of either student or teacher behavior.

3. A cluster analysis of the results indicated that there were probably two clusters of importance included in the scales: (a) a "warmth" cluster, and (b) a "maintenance of order" cluster.

4. A reconsideration of the criterion problem indicated that this type of approach leads to results that are logically unacceptable as criterion measures, and that an approach utilizing observation of student behaviors would be more acceptable.

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APPENDIX A
The rating scales

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 1

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

ADJUSTMENT OF CLASSROOM
(Well adjusted - Maladjusted)

Rate the general internal adjustment of the class as a whole in its day-by-day relationships. Is the classroom atmosphere characterized by satisfaction, stability, achievement, and happy adjustment; or by thwarting, unpleasantness, repression, and insecurity?

This is a broad variable, including conflicts among persons, among motives, or with obstacles. Conflicts may be emotional, social, economic, or physical; both overt and covert. Rate the total configuration--the quality of the students' classroom atmosphere.

- Exceedingly well-adjusted. Characterized by pleasant cooperation, security, and full satisfactions throughout.
- Fundamentally sound adjustment, but with minor conflicts here and there.
- Fairly smooth on surface, but suggests inducement of repression or insecurity.
- Definite evidence of mild maladjustment throughout.
- Dominated by maladjustment, coloring most class activities.
- Extreme maladjustment; torn with conflict, repression, and insecurity.

Score _____
Tolerance _____
Range _____

Rater _____ Date of rating _____

Rater's remarks: (continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 2

Teacher _____ Date of observation _____

Grade _____ School _____ Room _____ City _____

ACTIVENESS OF CLASSROOM
(Active - Inactive)

Rate the general activity level of the classroom, taking the class as a whole. Is the classroom atmosphere active, quick, and alert; or is it inactive, slow, and inert?

This is a broad, general variable, including amount and quickness of activity, alertness, decisiveness, and tension, insofar as they are manifest overtly as part of the students' environment.

- Classroom extremely bustling, busy, excited, tense.
- People in classroom move quickly, talk rapidly, work with dispatch. Classroom alert, wide-awake, moving, decisive.
- People move, talk, and work without haste, but with some dispatch. Classroom alert, but not hypertense.
- People move, talk, and walk with leisurely deliberateness. Classroom relaxed, but not lackadaisical.
- People move slowly, talk slowly, work slowly. Classroom passive, relaxed, easy-going, indecisive.
- Classroom poky, lackadaisical, lazy, slow-moving, procrastinating.

Score _____

Rater _____ Date of rating _____

Tolerance _____

Range _____

Rater's remarks:

(continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 3

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

DISCORD IN THE CLASSROOM
(Conflict - Harmony)

Rate the extent to which the classroom surrounds the students with an atmosphere of overt conflict, discord, unpleasant argument, recrimination, quarreling, complaining. Is the atmosphere marked by unpleasant discord among individuals? Or are the interpersonal relations of the classroom typically harmonious, friendly, and agreeable?

Include inter-student and student-teacher discord. Disregard other types of maladjustment, as worry, insecurity, illness, and cynicism. Include only insofar as it impinges more or less directly on the students.

- Classroom flies into vindictive recrimination, bitter disputes, on slightest provocation.

- Underlying discords often break through the general surface harmony as sharp arguments or ill-natured sarcasm. Frequent unpleasant wrangling, squabbling, complaining.

- Harmonious basic relationships, overlaid with a good deal of surface contention, bickering, and teasing.

- Tolerant, friendly. Arguments tend to be good-natured. Teasing occasional. Quarrels rare.

- Peaceful, harmonious, agreeable atmosphere reigns. Classroom harmony disturbed only under rare and extreme circumstances.

Score _____

Rater _____ Date of rating _____

Tolerance _____

Range _____

Rater's remarks: (continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 4

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

COORDINATION OF CLASSROOM
(Coordinated - Chaotic)

Rate the routine functioning of the classroom as to its smoothness of organization. Is it effectively planned and executed? Or is it uncoordinated and chaotic?

Rate on basis of effectiveness in operation rather than tendency to systematize every detail. Include care of belongings, coordination of schedule, planning, and general efficiency of organization as it works in practice. Disregard variation in aesthetic standards, style, quality and quantity of equipment, etc.

- Extremely effective management. Model of efficiency. Long-range planning, flexibly executed. Confusion unknown.

- Smooth-running and efficient on the whole. Classroom kept in order and on schedule most of the time. Activities planned ahead. Some superficial disorder.

- Fair coordination. Considerable disorder, but can usually find things. Some inefficiency of planning, but class activities are relatively adequate. Sometimes off schedule.

- Poor coordination; essential rudiments of organization are there, but inefficiency and confusion are common. Often late; off schedule half the time. Classroom disorderly.

- Chaotic, disorganized. Nothing happens on schedule. No planning. Equipment in tangled scramble. Confusion reigns even in essentials.

Score _____

Rater _____ Date of rating _____

Tolerance _____

Range _____

Rater's remarks:

(continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 5

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

STUDENT-CENTEREDNESS OF CLASSROOM
(Student-centered - Student-subordination)

Rate the organization of the classroom according to the degree to which it is built around the students' needs and welfare. Are the apparent needs of the students considered above the needs of the teacher to gratify himself in terms of his pleasure, desire to avoid work, or to rigidly follow his schedule?

Behavior is student-centered to the extent to which it involves sacrifice of pleasure, convenience, opportunity, etc., in attempting to benefit the students.

- Whole classroom revolves about the needs of the students; many major sacrifices for the students' trivial comforts.
- Consideration for the students clearly predominate but not to the extent of dire personal sacrifice on the part of the teacher.
- Needs of the students are recognized and considered to the extent that they do not disrupt planned classroom procedures or involve additional effort on the part of the teacher.
- Student needs get proportional consideration; are as often disregarded as attended to.
- Although given attention in critical matters, the needs of the students are often neglected in favor of other interests
- Classroom organized strictly about interests of the teacher. Student needs clearly neglected in favor of other interests.

Score _____
Tolerance _____
Range _____

Rater _____ Date of rating _____

Rater's remarks: (continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 6

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

INTENSITY OF CONTACT
(Vigorous - Inert)

Rate the reactivity of the teacher during contacts with the students. Does the teacher react readily and vigorously; or does he tend to disregard the students as much as possible?

"Reactivity" includes both initiating social intercourse with the students and responding to student initiative. It includes attention suggestion, affection, coercion, help, conversation, criticism, information, play, scolding, threatening, explaining, etc.

Rate only on situation where there is opportunity for stimulation-- independent of duration of contact.

- Intensively vigorous, overstimulating, excited.
- Active, readily attentive, vigorous.
- Fairly active, responsive, alert.
- Accessible, interested, half-hearted, reserved.
- Perfunctory, passive, retiring, taciturn, bored busy.
- Oblivious, absorbed, inaccessible, preoccupied.

Score _____

Rater _____ Date of rating _____

Tolerance _____

Range _____

Rater's remarks:

(continue on back of sheet)

MISSOURI TEACHER LEHAVIOR RATING SCALE NO. 7

Teacher _____ Date of Observation _____
Grade _____ School _____ Room _____ City _____

RESTRICTIVENESS OF REGULATIONS
(Restrictiveness - Freedom)

Rate the restrictiveness of the regulations set up or implied by the teacher as standards to which the students are expected to conform. Are the requirements numerous and severe; or few and mild? In meeting these standards would the child be highly circumscribed in his behavior, or would he still have a large measure of freedom?

Disregard whether requirements are sharply codified rules, or merely implied in the disciplinary policy. Disregard the teacher's motives and methods of enforcement. Include both prohibitions and positive requirements. Consider the standards expected, regardless of how well they are enforced.

- Teacher's standards for students' conduct are minutely restrictive beyond all reasonable interpretation of either students' welfare or classroom convenience.
- Requirements are unnecessarily abundant and exacting, but usually aimed at practical ends rather than "pure discipline"
- Restrictions are moderate and practical, but teacher shows little concern for students' freedom as an end, imposing requirements whenever they seem expedient.
- Standards and regulations are somewhat liberal. Freedom is allowed in a few matters commonly subject to regimentation.
- Students are expected to conform to a few basic standards but teacher will endure considerable annoyance rather than unduly restrict student freedom.
- Standards are both scarce and mild, limiting student freedom barely enough to avoid serious damage to persons and property.

Score _____ Rater _____ Date of rating _____
Tolerance _____
Range _____

Rater's remarks: (continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 8

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

READINESS OF ENFORCEMENT
(Vigilant - Lax)

Rate the teacher's tendency to enforce the standards of conduct set up for the students. Does the teacher follow up to see that the student conforms, or sustains a penalty? Or are lapses in compliance disregarded?

This variable applies only to situations where there is an opportunity for the teacher to enforce an accepted standard which has been, is being, or is about to be violated by the student. Disregard the method of enforcement and the severity of penalties. Disregard effectiveness of enforcement and clarity to the child of standards involved. Do not confuse with the non-regulatory type of teacher domination covered by the "suggestion" scales.

- Eternally vigilant. Goes out of way to discover and discipline misconduct. Often pounces before lapse occurs.

- Seldom lets student "get away" with anything. Enforces rules strictly whenever violations come to attention, but seldom deliberately hunts for misbehavior.

- Moderately firm. Strict about important requirements and prohibitions; but rather lax with minor violations, especially when they are not an issue at the moment.

- Reluctant to enforce standards. Tends to overlook violations unless they are flagrant, cumulative, or threaten serious consequences.

- Extremely lax. Disregards obvious misbehavior. Enforces regulations only when pressed by the strongest motives or the severest circumstances.

Score _____ Rater _____ Date of rating _____

Tolerance _____

Range _____

Rater's remarks: (continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 9

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

SEVERITY OF ACTUAL PENALTIES
(Mild - Severe)

Rate the severity of penalties imposed when teacher takes official notice of misconduct. Are penalties acutely severe, or light and inconsequential?

Do not consider situations where teacher entirely disregards misconduct, invoking no penalties. Include all censorial reactions from mild verbal reproof to severe corporal punishment and removal of privileges. Consider only such situations as come under express or implied regulations and standards. Try to judge the penalties in terms of their negative motivating power for the students.

- Severe penalties, frequently stimulating students to dread, terror, or deep personal resentment.

- Rather severe on the whole, but inclined to be lenient in extenuating circumstances.

- Moderate penalties. Severe enough to have definite motivating power for the child; but not so severe that the students are overinhibited, severely frightened, or deeply resentful.

- Mild penalties predominate. May be severe in critical situation; but penalties often seem too mild to have much motivating power.

- Most flagrant misbehavior provokes no penalty more severe than weak verbal remonstrance. Penalties are so light that their potency for the students is negligible.

Score _____ Rater _____ Date of rating _____
Tolerance _____
Range _____

Rater's remarks: (continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 10

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

JUSTIFICATION OF DISCIPLINARY POLICY AS PRESENTED TO THE CHILD
(Rational - Arbitrary)

Rate the teacher's tendency to explain to the students the reasons for requirements and penalties. Does the teacher attempt to put all discipline on a rational basis? Or are his policies presented in a purely arbitrary fashion to the child?

Disregard restrictiveness of regulations, and readiness and severity of enforcement. Disregard the clarity with which regulations are codified and the extent to which they are democratically set up. Include all control measures, whether pertaining to established policies or merely involving immediate suggestion.

- Goes out of way to show students practical reasons behind requirement and suggestions, even in emergencies or where explaining is difficult.
- Attempts to explain policies to students, as a general rule, but frequently arbitrary where the issue is very critical or complex.
- No apparent tendency favoring either the peremptory or the rational approach to student control.
- Arbitrary in most matters. Does not justify policies unless pressed. Often avoids the issue, or invokes moral precepts as reasons.
- Never explains policies to students. Handles discipline in very arbitrary fashion, expecting students never to question "why."

Score _____

Rater _____ Date of rating _____

Tolerance _____

Range _____

Rater's remarks: (continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 11

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

DEMOCRACY OF REGULATION AND ENFORCEMENT POLICY
(Democratic - Dictatorial)

Rate the teacher's tendency to share with the students the formulation of regulations for the students' conduct. Does the teacher give the students voice in determining what the policy shall be? Or does the teacher hand down the established policy from above?

Disregard immediate issues not covered by policy (see Coerciveness of Suggestion). Rate independent of justification of policy to students, and independent of restrictiveness of regulations. Include both overt consulting with students and considering students' expressed wishes. Dictatorial policies may be wise or foolish, benevolent or selfish.

- Endures much inconvenience and some risk to classroom welfare in giving students large share in policy forming. Consults with students in formulating policies whenever possible.
- Attempts to adjust policies to students' wishes whenever practicable. Often consults students.
- Deliberately democratic in certain safe or trivial matters, but dictates when there is a sharp conflict between student wishes and other essential requirements.
- Neither democratic nor dictatorial, deliberately. Follows most practical or easiest course in most cases.
- Tends to be rather dictatorial, but usually gives benevolent consideration to student desires. Seldom consults students.
- Dictatorial in most matters, but accedes to student wishes occasionally when they do not conflict with own convenience or standards.
- Dictates policies without regard to student wishes. Never consults students when setting up regulations.

Score _____ Rater _____ Date of rating _____
Tolerance _____
Range _____

Rater's remarks: (continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 12

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

CLARITY OF POLICY OF REGULATIONS AND ENFORCEMENT
(Clear - Vague)

Rate the clearness with which the teacher's standards of student conduct are manifested to the students. Are regulations and requirements clearly formulated and consistently executed, so that the students should be able to know what is expected of them and what will happen if they fail to conform? Or are the teacher's standards and policies so vague or fluctuating that the student has little chance of adjusting?

- Schedule and other standards are precisely formulated and adhered to meticulously. Teacher goes out of way to maintain clear, consistent policy regardless of special circumstances.
- Policies are sometimes adjusted to meet unusual circumstances but on the whole they are clear-cut and consistent.
- There is a core of reasonable consistency about teacher's policy, which serves as a stable basis for adjustment despite numerous minor fluctuations and vagueness about details.
- Standards are usually formulated, but exceptions and modifications are frequent enough to keep students readjusting. Schedule often upset.
- Regulations vaguely formulated. Enforcement uncertain and inconsistent. Student basis for adjustment is slight, even in some major matters.
- Policies of teacher in dealing with students are so erratic, unformulated, and inconsistent that students never know what to expect. Schedule chaotic.

Score _____

Rater _____ Date of rating _____

Tolerance _____

Range _____

Rater's remarks: (continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 13

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

EFFECTIVENESS OF POLICY OF REGULATIONS AND ENFORCEMENT
(Successful - Unsuccessful)

Rate the degree to which the student conduct meets the standards set by the teacher. Are the students well-behaved? Or do the students fail to meet the requirements implied in the teacher's control policy?

Rate in terms of the students' net overt behavior, disregarding the amount of coercion, threats, penalties, etc., employed in producing the behavior. Disregard student inner conflicts in conforming.

- Students conduct themselves in accord with teacher's standards in every respect. Teacher's policy achieves its goal.
- Teacher attains goal in all major respects and most minor ones.
- Policy predominately successful, although it fails in many instances and respects.
- Success very questionable. Teacher's regulations and enforcement fail to produce the desired results about as often as they succeed.
- Teacher's policy fails to elicit the desired behavior in most of the important aspects of control.
- Student overt behavior is entirely at odds with standards implied in policies of teacher. Policy entirely unsuccessful.

Score _____

Rater _____ Date of rating _____

Tolerance _____

Range _____

Rater's remarks: (continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 14

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

DISCIPLINARY FRICTION
(Contentious - Concordant)

Rate the amount of overt teacher-student conflict over the enforcement of regulations and requests. Is the relationship between teacher and students characterized by continuous wrangling, resistance, and rebellion in regard to student conduct? Or is discipline characterized by harmonious coordination, without bickering, threats, refusals, and penalties?

Disregard whether student conduct meets teacher standard. The question is, how much disharmony occurs as part of the teacher's attempt to control the students' conduct, both in enforcing routine standards and in making immediate suggestions.

- Situations to which regulations or standards apply are always characterized by overt teacher-child conflict. Teacher demands resisted. Friction continuous and acute.
- When student is supposed to do (or not to do) something, there is usually an argument, struggle, threat, or penalty. Friction frequent and marked.
- Teacher invokes penalties, child resists, etc., rather frequently, but harmonious adjustment in disciplinary situations is somewhat more usual. Friction moderate.
- Teacher-child clashes occur now and then, but they are exceptional, superficial, or mild.
- Disciplinary conflicts are exceedingly rare. Either the student conforms docilely, or the teacher tranquilly permits lapses. Friction extremely mild or absent.

Score _____ Rater _____ Date of rating _____

Tolerance _____

Range _____

Rater's remarks: (continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 15

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

QUANTITY OF SUGGESTION
(Suggesting - Non-suggesting)

Rate the teacher's tendency to make suggestions to the students. Is the teacher constantly offering requests, commands, hints, or other attempts to direct the students' immediate behavior? Or does the teacher withhold suggestions, giving the students' initiative full sway?

This does not apply to routine regulations and their enforcement. Rate only where there is opportunity for suggestion. Note that "suggestion" is defined broadly, including direct and indirect, positive and negative, verbal and non-verbal, mandatory and optional.

- Teacher continually attempting to direct the minute details of the students' routine functioning, and "free" activities as well.
- Occasionally withholds suggestions, but more often indicates what to do next or how to do it.
- Teacher's tendency to allow student initiative full scope is about equal to tendency to interfere by making suggestions.
- Makes general suggestions now and then, but allows students large measure of freedom to do things own way.
- Teacher not only consistently avoids volunteering suggestions but tends to withhold them when they are requested or when they are the obvious reaction to the immediate situation.

Score _____

Rater _____ Date of rating _____

Tolerance _____

Range _____

Rater's remarks: (continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 16

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

COERCIVENESS OF SUGGESTION
(Mandatory - Optional)

Rate as to dictatorial quality the teacher's suggestions in dealing with the students' immediate behavior. Does the teacher attempt to control a situation by issuing orders or commands to be obeyed? Or does the teacher make his suggestions optional or discretionary with the child?

Apply only where teacher is trying to influence students. Try to see through the verbal form to the significant content for the students--does the suggestion demand obedience, or is it a "mere suggestion?"

- Efforts to control students take form of peremptory orders, to be obeyed at once, even in trivial matters.

- Suggestions not quite absolute in coerciveness, but immediate compliance is expected in matters of any importance.

- Teacher coercive in major affairs, but uses optional suggestions where there is no important issue.

- Definite tendency to avoid coercion where possible, but uses it when exasperated or persistently unsuccessful with non-coercive suggestion.

- Commands resorted to only in life-and-death emergencies. Teacher goes out of way to avoid coercion in his suggestions to students.

Score _____

Rater _____ Date of rating _____

Tolerance _____

Range _____

Rater's remarks: (continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 17

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

GENERAL HELPING
(Over-helps - Withholds help)

Rate the teacher's tendency to help the students through the ordinary difficulties of everyday life. Does the teacher insist on helping in situations where the students are quite capable; or does the teacher withhold aid even in major difficulties?

Rate relative to the student ability level. Disregard deliberate drill and training. This is a general variable including motor, mental, emotional, and social behavior. It applies only to tasks the students are attempting, not to teacher-imposed requirements resisted by the students.

- Continually helping students, even when students are fully capable and willing.
- Usually helps more than needed. Seldom lets students struggle unsuccessfully.
- Helps when needed, but not when students can get by alone.
- Tends to withhold aid, letting students solve own minor problems. Offers help after prolonged failure or in emergency.
- Leaves students alone to solve even major problems, often refusing aid when requested.

Score _____

Rater _____ Date of rating _____

Tolerance _____

Range _____

Rater's remarks: (continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 18

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

GENERAL PROTECTIVENESS
(Sheltering - Exposing)

Rate the teacher's reaction to threats and hazards to the student well-being. Does the teacher tend to keep the students unnecessarily sheltered, and prevent difficulties from reaching the students? Or does the teacher tend to expose the students to dangers, perplexities, and difficulties?

This is a broad variable, including protection from physical, bacterial emotional, mental, and social hazards. Rate relative to the students' maturational level. Disregard whether students are aware of protection. How much does the protective attitude of the teacher tend to protect the students from experiencing difficulties?

- Tends to shelter students from every imaginable slight discomfort or difficulty.
- Not given to inventing imaginary hazards, but does protect from many trivial difficulties which students could handle.
- Allows students to be exposed to many minor difficulties, but shelters from serious upsets even if purely temporary.
- Lets students face own obstacles when there is no danger of lasting harm.
- Exposes students to rather tough situations, unless danger is quite serious or situation acute.
- Allows students to be exposed to major hazards, dangers, problems, suffering. Oblivious to hazards, or deliberately refrains from protecting students.

Score _____
Tolerance _____
Range _____

Rater _____ Date of rating _____

Rater's remarks: (continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 19

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

READINESS OF CRITICISM
(Critical - Uncritical)

Rate the teacher's tendency to express an approval-disapproval attitude toward the students' behavior. Does the teacher readily and vigorously express a reaction to things the students do; or is the teacher non-committal, repressed, uninterested, or stoical toward the students' actions?

Rate the tendency to express criticism regardless of whether it is approval or disapproval. Criticism may be verbal, gestural, or by facial expression or tone of voice--any signal to the student indicating approval or rejection of behavior in a specific situation.

- Alert to react to students' every move, regardless of how trivial.
- Quick and free in expressing approval - disapproval. Criticism may be mild, or withheld, if the matter is obviously trivial.
- Reacts freely when attention is called, but not alert for chance to criticize.
- Tends to refrain from reacting critically in unimportant matters. Usually responds when pressed.
- Withholds criticism unless greatly aroused. Tends to be poker-faced, non-committal,
- Gives no indication of either approval or rejection of student acts, regardless of importance.

Score _____
Tolerance _____
Range _____

Rater _____ Date of rating _____

Rater's remarks: (continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 20

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

DIRECTION OF CRITICISM
(Approval - Disapproval)

Rate the direction of the teacher's critical reaction to the student behavior. When the teacher reacts does it tend to take the form of praise, approval, acclaim? Or does blame, disapproval predominate?

Rate only situations where a critical reaction occurs--a reaction to behavior rather than general affectionateness or hostility. Criticism may be verbal, gestural, or by facial expression or tone of voice. It may be expressed either directly to the students or with the student as witnesses. Rate relative to the merits of the behavior criticised.

- Warm, unambiguous praise and commendation toward even rather ordinary behavior. Shortcomings overlooked or excused.

- Emphasis on approval. Most disapproval is sugarcoated with simultaneous acclaim.

- Balanced criticism. Praise, or disapprobation, predominates only as merited by student behavior.

- Tends to disapprove more readily than to approve. Most praise is tempered with faultfinding. Unduly critical of details.

- Teacher always finding fault. Ignores or belittles praiseworthy behavior, picking out minor details to criticise disproportionately.

Score _____

Rater _____ Date of rating _____

Tolerance _____

Range _____

Rater's remarks: (continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 21

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

READINESS OF EXPLANATION
(Satisfies curiosity - Thwarts curiosity)

Rate the teacher's tendency to satisfy the students' intellectual curiosity. Does the teacher readily respond to the students' "Why?" and "How?" questions; or is the student thwarted in attempts to get information and explanation from the teacher?

Disregard accuracy, depth, and honesty of answers. Note that explanations which are too ambitious, or too forced, may rate low; and the furnishings of specific references may rate high. Active coaching to think for self may rate high. Do not confuse with mental babying. A teacher may refuse to do the student's simple thinking, and yet go out of his way to help with difficult explanations.

- Never too busy to answer student questions as adequately as possible. Anticipates questions. Encourages curiosity with willing explanation.
- Goes out of way to answer fairly involved questions, but sometimes postpones till students are more advanced. May evade when very busy or very tired.
- Usually tries to satisfy student curiosity. Sometimes loses patience with persistent "Why's?"
- Answers simple questions when in good humor and not preoccup. but seldom goes beyond minimum needed to shut student up.
- Explanations are grudging and reluctant where any mental effort is required. Teacher often evades the issue.
- Thwarts student curiosity. Actively discourages questions, "Too busy," "Just because," etc.

Score _____

Rater _____ Date of rating _____

Tolerance _____

Range _____

Rater's remarks: (continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 22

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

SOLICITOUS FOR STUDENT WELFARE
(Anxious - Nonchalant)

Rate the teacher's tendency to display over-concern for the student well-being. Is the teacher readily excited to overt anxiety all out of proportion to the importance of the situation? Or is the teacher markedly calm, cool, and nonchalant, even in the face of critical danger to the students?

Consider the teacher's net behavior, regardless of the motives behind it. Include only behavior which is a potential stimulus to the students, impinging more or less directly upon their awareness. Include concern for both physical and mental comfort.

- Given to severe, irrational anxiety on largely imaginary grounds. Readily panicked.
- Chronic anxious tension over students, but more "jittery" than panicky. Given to "hunting for trouble."
- Shows considerable anxiety when students are in any danger, but seldom loses rational control.
- Somewhat solicitous, but minimizes hazards. Frequently shows concern, but without losing perspective.
- Rarely worried or solicitous beyond needs of situation and responsibility as a teacher. Attitude rather indifferent.
- Nonchalant and seemingly unconcerned even in major matters. So unsolicitous as to appear neglectful or irresponsible.

Score _____

Rater _____ Date of rating _____

Tolerance _____

Range _____

Rater's remarks: (continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 23

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

ACCEPTANCE OF STUDENTS
(Devotion - Rejection)

Rate the teacher's acceptance of the students with respect to his identification with students and consideration of them as individuals. Is he willing to accept students as persons who happen to be younger and less trained than himself? Or does he view students as troublesome creatures who must be endured for the sake of their possibilities as future adults or because it is part of the job?

Consider all evidence which in any way may impinge upon the students as acceptance - rejection, however subtle, vague, or indirect. It is not the teacher's true feeling but his attitude as a functioning unit in the students' environment which we are rating.

- Teacher's behavior is wholly accepting in the sense that he treats students as if they were personal friends.
- Teacher completely accepts students in the classroom situation but does not lose sight of the fact that he is their teacher.
- In general, the teacher identifies with students and acts as part of the "in-group" but falls back upon his role as teacher when the situation shows signs of getting out of hand.
- Teacher accepts students as students but never considers his role toward them as being other than that of teacher and maintains his dignity and authority in that position.
- Teacher's attitude is definitely that of aloofness and superiority, rejecting students as inferior beings.
- Teacher considers himself as being upon a pedestal and is strongly rejecting towards the "little monsters" whom he must teach.

Score _____

Rater _____ Date of rating _____

Tolerance _____

Range _____

Rater's remarks: (continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 24

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

EMOTIONALITY
(Emotional - Objective)

Rate the emotionality of the teacher's general behavior toward the students. Is the teacher's reaction highly emotional; or is it consistently cool and objective?

Rate only in situations where there is sufficient cause for emotion to bring it out if it is there. Combine frequency and intensity of emotion. Combine direct expression of emotion and irrational distortion of policy due to emotion. "Emotion," as used, includes manifestations of rage, panic, disgust, mirth, or sympathy, where feeling predominates over reason. Emotion may be considered to be positive or negative as long as it is irrational.

- Teacher constantly giving vent to unbridled emotion in reaction to student behavior.

- Controlled largely by emotion rather than by reason in dealing with students.

- Expression of emotion largely inhibited, but policy readily disorganized. Emotion freely expressed, but actual policy seldom much disorganized.

- Usually maintains calm, objective behavior toward students even in face of strong stimuli.

- Never shows any sign of emotional disorganization toward students, either directly or in policy.

Score _____

Rater _____ Date of rating _____

Tolerance _____

Range _____

Rater's remarks:

(continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 25

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

UNDERSTANDING
(Keen - Obtuse)

Rate the teacher's understanding of the students' abilities, needs, viewpoints, etc. Does the teacher's behavior indicate a thorough and intelligent understanding of the students; or does it indicate a failure to appreciate the capacities and limitations of the students and an inability to meet the students on their own level?

This might be called "functional teacher intelligence." It includes insight, foresight, student-empathy.

- Teacher always sees subtleties of student motivation; shows accurate appreciation of student interests and level of maturity.
- Usually shows thorough understanding of students. Occasionally fails to see the point.
- Has good grasp of everyday situations, but often misses the subtle angles.
- Usually shows common sense where the point is obvious, but incapable of keen analysis.
- Entirely lacking subtlety; often misses the obvious.
- Completely fails to see the student viewpoint, capacities, limitations. Expects entirely too much or too little. Fails to meet students on students' own ground.

Score _____ Rater _____ Date of rating _____
Tolerance _____
Range _____

Rater's remarks: (Continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 26

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

RAPPORT BETWEEN TEACHER AND STUDENTS
(Close rapport - Isolation)

Rate the closeness of the psychological relationship between teacher and students. Do they show a high degree of rapport; or are they distant and out of touch with each other "spiritually," tending to be inhibited in each other's presence?

This variable includes mutual understanding, sympathy, confidence, and sharing of aspirations, intimate thoughts, and feeling. Rate it independently of the dominance-submission relationship. Do not confuse with antagonism-harmony.

- Complete sharing of intimate thoughts and feelings. Implicit trust and confidence in each other.
- Close mutual understanding and sympathy, but with occasional temporary lapses.
- Moderate degree of rapport in most situations; achieve close confidence in a good many respects, but fails in other
- Do not get along together any too well, but occasionally a close relationship is temporarily established.
- Perfunctory relationship, superficial understanding, interest slight or forced. Tend to be inhibited in each other's presence.
- Spiritually isolated. No sharing of confidence and aspirations. No active interest in each other.

Score _____

Rater _____ Date of rating _____

Tolerance _____

Range _____

Rater's remarks; (continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 27

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

AFFECTIONATENESS
(Affectionate - Hostile)

Rate the teacher's expression of affection to the students personally. Does the teacher manifest a warm, personal affection to the students; or a matter-of-fact, unemotional attitude; or definite antagonism?

Rate the attitude shown to the students, rather than the deeper one which affects the students only indirectly as through care, solicitude, or degree of devotion to the students' welfare.

- Passionate, consuming, intense, ardent, uncontrolled.
- Affectionate, warm, fondling, loving expressive.
- Temperate, fond, attached, forgiving, kind.
- Objective, inhibited, neutral, matter-of-fact.
- Cool, aloof, distant, forbidding.
- Avoiding, annoyed, irritated, bothered.
- Hostile, rejecting, disliking, blaming, icy.

Score _____
Tolerance _____
Range _____

Rater _____ Date of rating _____

Rater's remarks: (continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 28

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

INTRA-GROUP ACTIVITY
(Student-student - Teacher-student interaction)

Rate the classroom situation in terms of amount of interaction among students. Is all activity carried on directly between teacher and student? Or is there much inter-student discussion?

Include both inter-student activity structured and approved by teacher and unstructured casual inter-student behavior.

- All classroom activity is between teacher and student. Students never interact except through the media of the teacher.
- Teacher permits occasional comments by one student to another student but maintains himself as the major focal point of all student discussion.
- Student interaction is frequent with activity closely structured and guided by teacher.
- Most discussion and activity conducted by students with occasional interference and guidance by teacher.
- Teacher contributes to classroom activity to about the same extent as any one student in the group.
- Teacher sits back and allows all classroom activity to be conducted by students, rarely adding any comments to the discussion.

Score _____
Tolerance _____
Range _____

Rater _____ Date of rating _____

Rater's remarks: (continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 29

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

GROUP ACTION
(Group identity - Self assertion)

Rate the degree to which students work together in discussion and classroom activity. Do students work on a problem as an integrated group, supporting and contributing to the assertions and ideas of other members of the group? Or do students tend to be more self-assertive, expressing individuality in contrast to activities of rest of group?

Expression of individuality may be either constructive, adding new ideas to the discussion or may serve as a tearing apart of other students. It may be approved of or disapproved of by the teacher.

- Students always work as a body, with individual contribution serving only to support and augment the activity of other members of the group.
- Group feeling predominates with occasional minor contradictory comments.
- Cooperation and individual assertion balance each other with group feeling and individual assertiveness about equal in the classroom behavior.
- A nucleus of group feeling is maintained but most classroom discussion is of a self-assertive nature.
- All student activity is self-assertive, with no consideration of the group, except as the group provides situations in which the individuals can express themselves.

Score _____

Rater _____ Date of rating _____

Tolerance _____

Range _____

Rater's remarks: (continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 30

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

ACCELERATION
(Push - Inertia)

Rate the extent to which the teacher attempts to force rapid progress in the pupils. Is he constantly forcing students to work more rapidly to progress to more advanced material? Or does he allow classroom activity to move along at its own rate, going on to more advanced material only when it seems that students know the currently covered topic to the point of boredom?

Consider pressure exerted on students to do homework, and amount of homework, pressure to go on to next topic even though students appear confused and have unanswered questions, and pressure to keep working no matter what alternative activity is suggested. Disregard teacher motivation. Thus a non-accelerative teacher may be motivated by personal laziness and non-preparation or by a desire to promote student development in non-academic ways.

- Teacher is constantly pushing students to work faster, to learn more, to concentrate; he is demanding and a slave-driver.
- Teacher attempts to keep class constantly moving forward at a rate slightly beyond student ability, and keeps after students fairly regularly about keeping up to date.
- Teacher expects students to progress in activity and generally keeps them working on activity at hand, but is willing to slow down or digress from topic when it seems to be to student advantage.
- Classroom progress moves slowly, teacher is willing to go no faster in the coverage of material than the slowest of his students.
- Almost the only progress made in class is by student incentive. It seems to matter little to the teacher if class shows any progress at all.

Score _____

Rater _____ Date of rating _____

Tolerance _____

Range _____

Rater's remarks: (continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 31

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

VALIDITY

(Observer changes situation - Observer ignored)

Rate the extent to which you feel that your presence alters the usual classroom activity. Does there appear to be a marked change in behavior and attitudes of teacher and students upon your entrance into the classroom? Or do you have the impression that your presence has no influence on the classroom situation?

Conditions to be noted include marked awareness of your presence by teacher and students, increase or decrease in activity, change in class plans, etc.

There appears to be a complete change in classroom situation
- due to your presence with alteration of class activity, change in teacher and student activities.

The classroom activity is definitely modified in consideration
- of your presence.

There is some change in classroom activity and atmosphere
- due to your presence, but this change is slight and does not significantly alter validity of observation.

Teacher and students are aware of your presence but in no
- way alter behavior and activity accordingly.

- Teacher and students appear to be oblivious to your presence.

Score _____

Rater _____ Date of rating _____

Tolerance _____

Range _____

Rater's remarks: (continue on back of sheet)

MISSOURI TEACHER BEHAVIOR RATING SCALE NO. 32

Teacher _____ Date of Observation _____

Grade _____ School _____ Room _____ City _____

TEACHER APPROACH TO STUDENTS
(Group oriented - Individual oriented)

Rate the extent to which teacher conceives of students as a relatively homogeneous group or as individuals. Does he conceive of his class as a whole, the members of which are relatively undifferentiated? Or does he attempt to adjust his behavior toward the individual students, as if each individual were a separate case with particular interests, abilities and problems of his own?

Consider time spent in instruction directed toward the group and time spent in individual instruction, willingness to answer individual questions not of pertinence to entire group, emphasis on bringing individual personal experience into the classroom, emphasis on individual fulfillment and attempts to encourage activities engaged in by individuals but not by group.

- Teacher conceives of class as completely homogenous group of students to be treated as a body, ignoring obvious differences.
- Marked differences amongst students are noted and given some attention, but the approach is decidedly mass group oriented.
- Teacher approaches class as group but welcomes individual departures from group activity. Teacher does not initiate individualization.
- Individual interests and activities encouraged but generally are brought into the group activity. Thus group may be performing same activity but each student is encouraged to approach the activity in individual ways.
- Major emphasis is placed upon individual activities with teacher falling back on mass approach only when individual approach seems highly unfeasible.
- Teacher behaves as if he were a privately hired tutor for each student, having each one working on entirely different and unrelated activities.

Score _____ Rater _____ Date of rating _____

Tolerance _____

Range _____

Rater's remarks: (continue on back of sheet)