Research in Rural Education, Volume 4, Number 2, 1987

Rural Teachers' Perceptions of the Effectiveness of Various Supervisory Practices[1]

JAMES LEVIN[2], NANCY HOFFMAN[3], AND BERNARD J. BADIALI[4]

Data on supervisory practices in four rural school districts in central Pennsylvania were gathered from elementary and secondary teachers using the Survey for Supervisory Practices. The survey includes questions related to the frequency, purpose and perceived value of supervision. One item, "The Supervision I Received Was Helpful to My Improvement as a Teacher" was used as the dependent variable to test sixteen independent variables using analysis of variance (ANOVA) and Duncan's Mean Separation Procedure. Null hypotheses concerning teachers' perceptions that supervision was helpful were rejected for five independent variables. Teachers ($N = 549$) indicated that they perceive supervision to be helpful when (1) they understand that the purpose of supervision is to assist them in improving their teaching; (2) they and supervisors jointly identify instructional changes; (3) the supervisor is able to get them to focus on their teaching; (4) the supervisor is knowledgeable about the teachers' instructional objective; and (5) they were observed enough by the supervisor.

The building principal's role as instructional leader has been emphasized in recent literature on educational administration. This emphasis is also apparent in the literature on rural education. The Rural Educators of America have listed identification of characteristics of effective leadership in rural schools as a research priority [6]. Instructional supervision is one aspect of educational leadership which is often assigned to building principals.

A rural administrator who may be solely responsible for the leadership of one or more buildings may find little time to allocate to instructional supervision. The rural administrator who wishes to allocate scarce supervisory time most efficiently will find little research to guide the selection of supervisory strategies. This study sets out to identify supervisory behaviors which positively affect rural teachers' perceptions of the value of instructional supervision in improving their daily teaching. Many of the supervisory behaviors used in this study were drawn from clinical supervision as described by Cogan [2].

PROCEDURE

Data on existing practices in elementary and secondary schools in four rural school districts in central Pennsylvania were gathered with the Survey of Supervisory Practices (SSP) [4]. These districts were classified as rural using a school density measure developed by The Pennsylvania Department of Education, [5]. Schools in Pennsylvania are classified in the following manner: 7 indicates a school in Philadelphia or Pittsburgh; 6 indicates a school inside a large city (100,000–500,000); 5 indicates a school in a medium size city (10,000–100,000); 4 indicates a school in a suburb of Philadelphia or Pittsburgh; 3 indicates a school in the suburb of a large city; 2 indicates a school in the suburb of a medium size city; 1 indicates a school in a small town (less than 10,000 people); and 0 indicates a school in open country or a farming community. The range of density scores for the four districts was .47 to .90.

The SSP focuses on supervisory in-class observations and related communications for the improvement of teaching practices. The SSP includes questions related to the frequency of supervisory practices, the perceived purpose of supervision, and the perceived value of that supervision. The survey contained forced choice, short answer, and Likert-type items. The Likert-type item "THE SUPERVISION I RECEIVED WAS HELPFUL TO MY IMPROVEMENT AS A TEACHER" was used as a measure of the effectiveness of the supervision and served as the dependent variable (HELP) in the study.

There were sixteen independent variables. Table 1 lists these variables with a description of the variable, the number of levels of the variable, and a description of the levels. All Likert scales ranged from 1 to 9 with 1 being strongly agree and 9 being strongly disagree. For purposes of analysis the independent Likert variables were transformed into discrete variables by collapsing them into three levels: strongly agree to agree; neutral; and disagree to strongly disagree.

The data were analyzed as an interaction model. Each teacher's measure on the dependent variable HELP was assumed to be represented by a linear combination of the

[1]The authors gratefully acknowledge the assistance of Dr. Lee Goldsberry in the design of the Survey of Supervisory Practices and data collection.

[2]From The Pennsylvania State University, 104 Granbe, University Park, PA 16802.

[3]From The Pennsylvania State University, 173 Chambers, University Park, PA 16802.

[4]From The Pennsylvania State University, 260 Chambers, University Park, PA 16802.

TABLE 1

Description of Independent Variables

Variable Name	Description	No. of Levels	Description of Levels
LVL	teaching levels	2	(1) elementary; (2)secondary
TIME	number of times teacher was observed	5	(1) 1; (2) 2; (3) 3 or 4; (4) 5 to 8; (5) 9 to 20
AVER	average length of time of a supervisory observation (mins.)	4	(1) 1 to 15; (2) 16 to 30; (3) 31 to 45; (4) 46 to 60
PRECONF	preconferences prior to observations	2	(1) yes; (2) no
PTCONF	postconference after observations	2	(1) yes; (2) no
PUROBS	purpose for the observation	4	(1) formal rating; (2) improve teaching; (3) comply with legal requirements; (4) other
LPLN	teacher's lesson plan utilized by supervisor prior to observation	3	(1) not examined; (2) supervisor examined prior to or during observation; (3) supervisor discussed lesson plan with teacher prior to observation
FOCUS	focus of the observation	5	(1) whatever supervisor felt was important; (2) state criteria; (3) school district criteria; (4) specific content or grade level teachers' criteria; (5) criteria jointly developed by supervisor and teacher related to teacher's needs
SIMP	Source of possible improvements as a result of observations and supervisory practices	5	(1) supervisor independently recommended changes; (2) supervisor and teacher jointly identified changes; (3) teacher identified changes and discussed with supervisors; (4) teacher identified changes but did not discuss with supervisor; (5) no changes identified
L2	Likert scale: supervisor had good grasp of what teacher was trying to do in the classroom	3	(1) strongly agree to agree; (2) neutral; (3) disagree to strongly disagree
L4	Likert scale: supervisor really got me to think about my own teaching	3	(1) strongly agree to agree; (2) neutral; (3) disagree to strongly disagree
L5	Likert scale: supervisor did not observe me enough to get a broad accurate overview of my teaching	3	(1) strongly agree to agree; (2) neutral; (3) disagree to strongly disagree
L8	Likert scale: student achievement is emphasized by supervisor when discussing my teaching effectiveness	3	(1) strongly agree to agree; (2) neutral; (3) disagree to strongly disagree
L9	Likert scale: supervisor is not clear/specific regarding his/her perceptions of my teaching strengths	3	(1) strongly agree to agree; (2) neutral; (3) disagree to strongly disagree
L10	Likert scale: supervisor is not clear/specific regarding his/her perceptions of my teaching weaknesses	3	(1) strongly agree to agree; (2) neutral; (3) disagree to strongly disagree
L11	Likert scale: supervisor provided on-going help when specific changes in my teaching were recommended	3	(1) strongly agree to agree; (2) neutral; (3) disagree to strongly disagree

16 independent variables (Table 1) and 15 two-way "LEVEL" interaction effects (LVL by 15 remaining independent variables).

The Statistical Analysis System [7] was used to analyze the data. The General Linear Model Procedure (GLM) for unbalanced analysis of variance was used to test for significant main and interaction effects. The significant level was set at the .05 level.

When significant differences were found, for the main effects, the Duncan's Mean Separation Option [7] was used to test for differences between the means for the various levels of the independent variables. The significance level for the Duncan's Option was also set at the .05 level.

The SSP was given to teachers in four K-12 rural districts in central Pennsylvania during the 1982-83 school year. The four districts included 26 elementary schools and 13 secondary schools. Usable responses were

TABLE 2

Results of Analysis of Variance of Dependent Variable "The Supervision I Received Was Helpful to My Improvement as a Teacher" (HELP)

Source	*df*	*SS*	*F*	*p*
Total	548	2005.17		
LVL	1	0.42	0.28	0.59
TIME	4	4.26	0.71	0.58
AVER	3	7.58	1.69	0.17
PRCONF	1	1.71	1.15	0.28
PTCONF	1	1.53	1.02	0.31
PUROBS	3	27.00	6.04	0.00**
LPLN	2	5.65	1.89	0.15
FOCUS	4	4.99	0.84	0.50
SIMP	4	23.66	3.97	0.00**
L2	2	19.09	6.40	0.00**
L4	2	117.89	39.53	0.00**
L5	2	10.73	3.60	0.03*
L8	2	8.28	2.78	0.06
L9	2	5.57	1.87	0.16
L10	2	2.31	0.78	0.46
L11	2	4.62	1.55	0.21
LVL*TIME	4	0.83	0.14	0.97
LVL*AVER	3	0.96	0.21	0.89
LVL*PRCONF	1	0.38	0.26	0.61
LVL*PTCONF	1	0.18	0.12	0.34
LVL*PUROBS	3	5.03	1.12	0.34
LVL*LPLN	2	7.26	2.44	0.89
LVL*FOCUS	4	7.15	1.20	0.31
LVL*SIMP	8	17.51	2.94	0.02*
LVL*L2	4	2.77	0.93	0.39
LVL*L4	2	0.83	0.28	0.76
LVL*L5	2	1.17	0.39	0.67
LVL*L8	2	0.18	0.06	0.94
LVL*L9	2	2.44	0.82	0.44
LVL*L10	2	0.78	0.26	0.77
LVL*L11	2	2.64	0.88	0.41
Error	475	708.33		

provided by 549 teachers, 257 elementary and 292 secondary teachers. This represents a response rate of 55 percent. More than half (56%) of the respondents were women and 55% had ten or more years of teaching experience. Less than half the respondents (40%) held a master's degree.

RESULTS

Null hypotheses stating that there were no effects on teacher's perception that supervision was helpful (HELP) were retained ($p = .05$) for level (LVL), number of observations (TIME), average length of observation (AVER), preconferences (PRCONF), postconferences (PTCONF), use of teacher's lesson plans by the supervisor (LPLN), focus of the observation (FOCUS), emphasis of student achievement by supervisor (L8), supervisor's clarity with respect to teaching strengths (L9), supervisor's clarity with respect to teaching weakness [10], and supervisor's ongoing assistance (L11) (Table 2).

TABLE 3

Duncan's Mean Separation for (HELP) For Predictor Variable (PUROBS)

	Assisting Improving Teaching	Formal Rating	Other	Legal Requirement
HELP	2.47	4.13	4.87	5.17
N	(111)	(215)	(15)	(208)

The null hypothesis stating there was no effect due to purpose for the observation (PUROBS) was rejected ($p = .05$) (Table 2). The values in Table 3 indicate that teacher's perceived supervision to be the most helpful when the purpose of the observation was to "assist in improving teaching." This was significantly different from their perceptions of supervision's helpfulness when the purpose of the observation was for "formal rating," "other," or "legal requirements." Teachers also had a significantly more positive perception of supervision's helpfulness when the purpose of observation was "formal rating" rather than "other" or "legal requirement."

The null hypothesis stating there was no effect due to the source of possible improvements (SIMP) was rejected ($p = .05$) (Table 2). Table 4 indicates that teachers perceived supervision as significantly more helpful when changes were "jointly identified with the supervisor" as opposed to changes "solely identified by the supervisor" or "solely identified by the teacher either with or without discussion with the supervisor." A significant difference in perceived helpfulness was also noted when the "supervisor independently identified changes" as opposed to when the "teacher independently identified changes." There were no significant differences in perceived helpfulness if the "teacher independently identified changes regardless if these changes were or were not discussed with the supervisor." However, "teacher identification of changes" did result in a significant difference in perceived helpfulness as opposed to when "no changes were identified."

The null hypothesis stating there was no effect due to the teacher's perception of the supervisor's ability to get the teacher to think about their teaching (L4) was rejected ($p = .05$) (Table 2). Table 6 indicates that teachers perceived the supervision as most helpful when they "agreed" that the supervisor was able to get them to focus on their own teaching. This was followed by feelings of "neutrality" and "disagreement." All of these perceptions were significantly different from one another.

The null hypothesis stating there was no effect due to the teachers' perception of whether they were observed enough by the supervisor (L5) was rejected ($p = .05$) (Table 2). Table 7 indicates that teachers perceived the most improvement when they "agreed" that they were observed enough. This was followed by feelings of "neutrality" and "disagreement." All of these were significantly different from one another.

The only null hypothesis for two-way interactions that

TABLE 4

Duncan's Mean Separation for (HELP) For Predictor Variable (SIMP)

	Joint Supervisor Identified Changes	Supervisor Independently Identified Changes	Teacher Identified Discussed Changes With Supervisor	Teacher Identified But Did Not Discuss Changes With Supervisor	No Changes Identified
HELP	3.13	3.84	3.96	4.40	5.22
N	(173)	(83)	(24)	(20)	(249)

TABLE 5

Duncan's Mean Separation for (HELP) For Predictor Variable (L2)

	Agree to Strongly Agree	Neutral	Disagree to Strongly Disagree
HELP	3.83	5.45	6.89
N	(432)	(82)	(35)

TABLE 6

Duncan's Mean Separation for (HELP) For Predictor Variable (L4)

	Agree to Strongly Agree	Neutral	Disagree to Strongly Disagree
HELP	3.03	4.71	6.57
N	(237)	(230)	(82)

TABLE 7

Duncan's Mean Separation for (HELP) For Predictor Variable (L5)

	Agree to Strongly Agree	Neutral	Disagree to Strongly Disagree
HELP	3.57	4.57	5.35
N	(286)	(109)	(154)

TABLE 8

HELP Means for Level of School (LVL)

LVL	*N*	HELP
Elementary	257	4.17
Secondary	292	4.35

TABLE 9

HELP Means for Number of Times Teachers Was Observed (TIME)

TIME (Freq)	*N*	HELP
9 to 20	72	3.83
3 to 4	102	4.13
2	85	4.14
5 to 8	148	4.17
1	139	4.76

TABLE 10

HELP Means for Average Length of Time of a Supervisory Observation (AVER)

AVER (mins)	*N*	HELP
46 to 60	16	3.88
16 to 30	213	3.97
31 to 45	148	4.06
1 to 15	172	4.84

TABLE 11

HELP Means for Preconferences Prior to Observation (PRECONF)

PRCONF	*N*	HELP
Yes	73	3.34
No	476	4.41

TABLE 12

HELP Means for Teacher's Lesson Plan Utilization By Supervisor Prior to Observation (LPLN)

LPLN	*N*	HELP
Supervisor discussed lesson plan with teacher prior to observation	35	3.57
Supervisor examined lesson plans prior to or during observation	275	3.87
Lesson plans not examined	239	4.82

TABLE 13

HELP Means for Focus of the Observation (FOCUS)

FOCUS	*N*	HELP
Criteria jointly developed by supervisor/teacher related to teacher's needs	47	3.34
Specific content or grade level teacher's criteria	58	3.34
State criteria	71	4.35
School district criteria	147	4.37
Whatever supervisor felt was important	196	4.79

TABLE 14

HELP Means for Postconferences After Observations (PTCONF)

PTCONF	*N*	HELP
Yes	380	3.89
No	169	5.10

TABLE 15

HELP Means for Likert Scale: Student Achievement Is Emphasized by Supervisor When DiscussingMy Teaching Effectiveness (L8)

L8	*N*	HELP
Agree to strongly agree	267	3.44
Neutral	159	4.62
Disagree to strongly disagree	123	5.60

TABLE 16

HELP Means for Likert Scale: Supervisor is *Not* Clear/Specific Regarding His/Her Perceptions of my Teaching Strengths (L9)

L9	*N*	HELP
Disagree to strongly disagree	342	3.52
Neutral	103	5.04
Agree to strongly agree	104	5.94

TABLE 17

HELP Means for Likert Scale: Supervisor is *Not* Clear/Specific Regarding His/Her Perceptions of my Teaching Weaknesses (L10)

L10	*N*	HELP
Disagree to strongly disagree	313	3.47
Neutral	134	4.94
Agree to strongly agree	102	5.81

was rejected ($p = .05$) was school level (LVL) by source of possible improvements (SIMP) (Table 2). Elementary teachers perceived supervision to be more helpful than secondary teachers when the "supervisor independently recommended changes." A reversal of perceptions occurred when the "teacher identified changes and discussed these with the supervisor" in that secondary teachers perceived supervision to be more helpful than elementary teachers. Another significant reversal occurred in perceived helpfulness when "teachers independently recommended changes." In this case elementary teachers again perceived supervision to be more helpful than secondary teachers. Both levels of teachers perceived supervision to be more helpful when changes were jointly identified by supervisor and teacher.

Although the null hypothesis failed to be rejected for many of the independent variables, it is interesting to note the differences in teachers' perceptions of the helpfulness of supervision with respect to the various levels of these variables. Teachers perceived supervision to be more helpful in elementary schools (LVL) (Table 8). Supervision was also perceived as more helpful when the frequency of observation was 9 to 20 times (TIME) (Table 9); when the average length of an observation was between 46 and 60 minutes (AVER) (Table 10); when there was a preconference (PRCONF) (Table 11); when the supervisor discussed lesson plans with the teacher prior to the observation (LPLN) (Table 12); when the focus of the observation was jointly developed by the supervisor and teacher (FOCUS) (Table 13); when there was a postconference (PTCONF) (Table 14); when the supervisor emphasized student achievement when discussing teacher effectiveness (L8) (Table 15); when the supervisor was clear and specific when discussing teaching strengths (L9) (Table 16) and weaknesses (L10) (Table 17); and when the supervisor provided on-going help to the teacher when changes in teaching were recommended (L11).

CONCLUSIONS

The results of this study underscore several significant factors which rural administrators may wish to consider in planning an instructional supervision program. Improving teachers' perceptions regarding the helpfulness of supervision is more likely to occur if:

1. Teachers understand that the purpose of supervision is to assist them in improving their teaching;
2. Teachers and supervisors jointly identify instructional changes;
3. The supervisor is able to get teachers to focus on their teaching;
4. The supervisor was knowledgeable about the teacher's instructional objectives;
5. Teachers perceive that they have been observed enough by the supervisor.

Based on the five significant findings of this study, the authors would like to suggest several strategies that should be considered in planning an instructional supervision

program. Until teachers perceive the supervisory process as helpful, there is little chance that a supervisor can achieve his or her intended goal—the improvement of instruction. The results of this study suggest that teachers find supervision helpful when the supervisor's purpose is to assist them in improving their teaching. Supervisors should communicate their intentions early and reinforce the notion continually that they are interested in instructional improvement, not simply interested in gathering enough data to give the teacher a formal rating.

There are several ways in which supervisors can demonstrate their commitment to instructional improvement. First, they need to become knowledgeable about the teacher's instructional objectives. One of the most expedient methods is through a brief preconference where the teacher and supervisor examine and discuss lesson plans or the teacher's intended learning outcomes.

The postconference also presents the supervisor with the opportunity to focus on the teacher's instructional objectives. This can be accomplished when postconference discussion is continually directed towards the teachers intended learning outcomes. Regardless of the timing, the authors recommend that supervisor and teacher discuss the objectives of the lesson. Ideally, the objectives will be discussed in both pre and postconferences.

A second way supervisors can demonstrate their commitment to instructional improvement is to get teachers to focus on their teaching. One way to do this is to record data on teaching behaviors during the observation. Written data can be extremely useful and most wieldy to supervisors [3]. The emphasis should be on teachers' behaviors not supervisory judgments [1]. Later this recorded data can act as a neutral "third party" when analyzing a lesson. The teacher and supervisor can focus on recorded data thereby minimizing the opportunity for confrontation and enhancing the opportunity for objective discussion. The obvious time for this discussion is during the postconference.

After supervisors demonstrate that they are knowledgeable about the objectives and after they have assisted the teacher in focusing on his or her teaching, a third strategy for improving instruction lies in a collaborative effort wherein instructional changes are jointly identified. Once again it seems that the best opportunity for this collaboration is during a postconference.

It has been suggested that to accomplish instruction improvement, a supervisor should make good use of pre and postconferences. While it is true that the preconference and postconference were not reported as significant in this study, it may be due to the fact that they had an inappropriate focus. A conference of either type obviously needs to go beyond a "ceremonial congratulations." The supervisor and teacher need to get past superficial issues and collaboratively discuss target (student) behaviors and affecting (teacher) behaviors [1].

Finally, the above practices, however potent, will be of little value unless teachers perceive that they have been observed enough by the supervisor. As reported above, one observation per year seriously limits much chance of instructional improvement.

REFERENCES

1. Boyand, N., & Copland, W. *Instructional supervision training program.* Columbus, OH: Charles E. Merrill, 1978.

2. Cogan, M.L. *Clinical supervision.* Boston: Houghton Mifflin, 1973.

3. Goldhammer, R. *Clinical supervision: Special methods for the supervision of teachers.* New York: Holt, Rinehart and Winston, 1969.

4. Goldsberry, L., Harvey, P., Hoffman, N., Levin, J., Badiali, B., & Vadella, R. *The survey of supervisory practices.* Educational Resources Information Center, ED 259 456f, 1985.

5. Kohr, R.L. *An examination of community type differences in the educational quality assessment data.* Harrisburg, Pennsylvania Department of Education, 1983.

6. *Rural Education News.* 37:3; Spring 1986.

7. Statistical Analysis System Institute. *SAS user's guide: Statistics.* Cary, NC, 1982 Edition.