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ABSTRACT

This study measures performance frequency of leadership tasks of approximately 20 percent of Colorado's principals. Principals most experienced do not differ from others on the frequency assessment scale, yet spend more time on instructional leadership activities, which range from teacher support (professional growth opportunities, rewards) and classroom observation (traditional principal-teacher, as well as teacher-teacher and teacher-principal), to school climate programs and clinical supervision strategies. Results show no real difference in performance frequency among principals at various grade levels. Experience and gender likewise have no influence. At the same time, more time is reported spent on instructional leadership by very experienced principals (17-plus years). Both elementary and secondary principals use facilitative strategies as a primary means of instructional improvement. Finally, whether one is assigned to the elementary or secondary level has no bearing on leadership role assumption. (KS)

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A Comparative Analysis of
Elementary and Secondary Principals'
Instructional Leadership Behavior

by

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ABSTRACT

A 21 item questionnaire was constructed to measure frequency of elementary and secondary principals' instructional leadership activities. Three open-ended items asked principals to estimate time spent on business management and instructional leadership, and to describe effective strategies they use to improve instruction. A stratified random sample of 110 elementary, 111 junior high and 111 senior high principals received mailed questionnaires. Responses were analyzed from a return rate of 67%, or 219 principals. Results of qualitative analysis revealed no significant difference between principals at three levels in their performance of instructional leadership tasks or time spent on business management. Principals with 17 or more years of experience reported spending significantly more time on instructional leadership than did less experienced principals. Results of qualitative analysis identified eight categories of effective instructional improvement strategies. The most commonly used were classroom observation and teacher support; least commonly used were clinical supervision and school climate improvement programs. Survey results identified a gap between normative and descriptive administrative behavior.

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Identifying and Comparing Instructional Leadership Behavior of Elementary and Secondary Principals

Can secondary principals be instructional leaders? Firestone and Herriott (1982), in a report of their survey research, suggested that inherent differences between levels give elementary principals more opportunity to be instructional leaders. Unique secondary school characteristics (larger staff size, instructional departmentalization, and diverse goals) prevent or modify the secondary principal's instructional leadership role. Therefore, they argue, instructional leaders at different levels have different tasks to perform. Due to these constraining characteristics, the secondary principal may rely on "facilitative leadership", which does not require frequent communication. The secondary principal may rely upon leadership from other personnel or external resources to stimulate instructional improvement. Examples of facilitative leadership include resource allocation, teacher assignment to courses, and "treating teachers as professionals." Firestone and Herriott have called for studies that ask questions about how to promote achievement at the secondary level.

The extant research has left several questions unanswered. First, if elementary principals have more opportunity to be instructional leaders, do they take that opportunity? Second, do elementary and secondary principals perform different tasks to achieve instructional improvement? What are these tasks at each level?

We attempted to answer these questions by surveying principals at various grade levels. This article first summarizes the literature identifying instructional leadership tasks and the principal's role as

instructional leader. Second, we report the design of the instrument used to identify and measure instructional leadership behavior across levels and resulting data collection procedures. Third, we present our findings regarding instructional leadership behavior in a comparative analysis between grade levels. Finally, the summary section contrasts our results to previous literature.

Review of Related Literature

What is an instructional leader? A search of the literature does not provide an explicit definition. Rather, instructional leaders are defined descriptively by the tasks they perform. Carmine, Gersten and Green (1982) provided a rationale for this type of definition by stating that functions are easier to define operationally and measure than is the elusive notion of instructional leadership.

What then are the functions of instructional leaders? Henschley, McCleary and McGrath (1970) have proposed that "the setting of objectives is the first step in instructional leadership" (p. 482-483). They describe an instructional leader as "one who has reflected on the mission of education and has formulated at least a tentative answer" (p. 483).

Tasks which secondary principals should perform in the role have been identified by Brieve (1972). Principals who are instructional leaders:

...route educational materials to faculty, keep teachers informed of workshops and classes, study, read, and visit other settings to observe instructional strategies, and formulate strategies and techniques to help teachers with instruction. (p. 367)

Educational leadership tasks were cited by RieG (1977) as including:

...supervising and evaluating school staff, preparing proposals for funding, revising or developing school policies, planning and conducting staff inservice, training staff for special state or federal programs and evaluating general school programs. (p. 85)

Reid stated also that principals who see their role as that of educational leader are concerned with improving the performance of the school and tend to resist the role of school manager. Other behaviors that characterize principals as effective innovators include:

...attending conferences, talking with university researchers, reading about education, looking outside the system, and meeting with other innovators. (California State Legislature, 1978)

Bossert (1982) delineated four functions common to principals in effective schools that added instructional improvement. The principal developed a school wide commitment to basic skill instruction, stimulated higher staff expectations of students, created a school climate conducive to learning, and employed a system of establishing clear instructional objectives.

In 1977, Johnson and Sloan surveyed elementary school principals to determine specific behaviors reflecting instructional innovation.

Tasks addressed in their questionnaire included:

...providing inservice training for faculty, assessing faculty morale, providing recognition for faculty members regarding noteworthy accomplishments, using outside consultants to assist in development of curriculum strategies, and providing information to the community regarding curricular achievements. (p. 12)

Vick (1971) stated that principals who want to be instructional leaders must allow their staffs to function as individuals. He saw the principal as a facilitator who "must provide flexible scheduling and inter-departmental planning in order to facilitate educational innovation." (p. 31)

Having identified instructional leadership tasks, consensus is found in the literature that these practices should be performed by the building principal (Awender, 1978; Mahan, 1970; Goodlad, 1976; Sause, 1974). The California State Legislature (1978) in its summary of findings reported:

1. Research indicates that at schools where student achievement is higher than might be expected, principals provide strong leadership and support.
2. Studies show that the principal is the most effective agent for bringing about educational improvement for effective schooling. (p. 8)

Despite the agreement on the importance of the principal's role as instructional leader, research which has assessed these behaviors demonstrated little evidence of the reality of that function. A time-motion study of principals revealed that the majority of principals' time was spent in pupil and staff personnel areas, while minimal amounts of time were spent during a work week in activities related to curriculum and instruction (Blumberg and Greenfield, 1980). In addition, Erlandson (1980) found that among four principals studied, not all were equal in their understanding of instruction, and as a result not all had clear intentions for instruction. Supporting this view, the California study (1978) emphasized that although principals' leadership for effective schooling is essential, many are neither prepared nor encouraged to be educational leaders. Goodlad (1976) found that managerial demands continually detracted from principals' instructional leadership efforts. A study undertaken by Krajewski (1978) in which 1,127 Texas principals were surveyed revealed the role of instructional supervisor as the ideal first priority of principals.

Results also revealed, however, that this role ranked fifth in ten roles principals actually performed.

The discrepancy between normative and descriptive behavior was explained by Roe and Drake (1974) who observed that:

...It is virtually impossible to assume that the principal can be a real instructional leader and at the same time be held accountable for the general operation and management detail required by the central office (p. 19). The educational leadership emphasis is the one that most principals profess they dream about but never achieve (p.13).

Purpose of the Study

This study was undertaken to explore the tasks performed by principals when acting as instructional leaders. The central questions this study sought to answer were: (1) Is there a difference in performance frequency of instructional leadership tasks between elementary and secondary principals? (2) Do years of experience in the role, number of years certified, or gender influence this frequency? (3) Is there a difference in the amount of time spent on instructional leadership or business management between principals at elementary and secondary levels? and (4) What strategies do principals at various levels use, to improve instruction in their buildings? Our hypothesis was that there would be no difference in the frequency of tasks performed as instructional leader between elementary, junior and senior high principals. The level for rejection of the null hypothesis was set at $\alpha = .05$.

Method

Instrument Design: Content and Format

The first section of the questionnaire asked principals to complete items that yielded demographic data. Principals were asked to

indicate their level (elementary, junior high or senior high), years of experience as a principal, year certified, and their gender.

Individual or school names were not solicited.

The second section was comprised of 25 items designed to assess the performance frequency of principals' leadership tasks. Twenty-one items reflected the literature review (e.g., preparing proposals for funding, setting objectives, conducting inservice, assessing morale); four items served as distractors, reflecting management functions. These four items were included to ensure that a bias in responses was not produced by encouraging an artificial orientation towards instructional leadership behavior in the mind of the respondent. The four response categories reflected how often the principal performed each activity, ranging from "never" to "more than 10 times" during the academic year.

The third section included three open-ended questions that tapped instructional leadership behavior in terms of quantity and quality. Principals were asked to: (1) estimate the percentage of time they spent on instructional leadership, (2) estimate the percentage of time they spent on business management, and (3) describe the most effective strategy they used for improving instruction in their buildings.

Instrument Design: Reliability and Validity

Content validity was established by using two methods. First, questionnaire items measuring instructional leadership behaviors were based on previously identified tasks from school administration text and research authors. Second, the items were field tested on three practicing principals who had reputations among their colleagues as instructional leaders. These principals indicated the items did

represent a partial list of activities they engaged in when acting as instructional leaders.

To establish reliability, a test for internal consistency was performed, based upon results of a pilot study. The questionnaire was mailed to 40 randomly selected principals (20 elementary and 20 secondary) yielding a response rate of 75%. Responses to the 21 item instructional leadership scale were analyzed using the SPSS program. A reliability level of .85 was established for the total scale. None of the items detracted from this level of reliability, thus indicating all items were measuring the same general construct.

Sample

Questionnaires were mailed to a stratified random sample of 332 Colorado principals, representing 30% of the principals in the state. The stratified sample included 110 elementary, 111 junior high school and 111 senior high school principals. The sample size was determined by applying several criteria. First, the sample solicited responses from an approximately proportional number of urban, suburban and rural principals. Second, because the study focused on level differences, principals who were responsible for more than one level (e.g., those sharing an elementary and junior high principalship) and middle school principals were eliminated from the sample. Third, principals who were sampled for the pilot study were excluded from the sample.

Data Collection

Questionnaires were returned by 219 principals, or 67% of the sample (after follow-up letters were sent). The response represents approximately 20% of the state's principals. From these responses, 190 questionnaires contained enough completed information to be useable for

multifactor ANOVA; 217 were useable for single factor quantitative analysis. Responses were analyzed from 65 elementary principals (response rate of 62%), 72 junior high principals (response rate of 65%), and 80 senior high principals (response rate of 73%).

Findings

Quantitative Analysis

Analysis of demographic data revealed interesting information about the sample. The majority of principals had 1-5 years of experience, were certified in the 1960s and 1970s and were male. The male principals had more years of experience than did the females, with most females certified in the 1970s or 1980s.

Responses from the 21 item questionnaire were analyzed in a 2(Sex: male, female) X 3(Level: elementary, junior high, senior high) X 4(Years Certified: 1950s, 1960s, 1970s, 1980s) X 4(Years Experience: 1-5, 6-10, 11-16, 17+) Analysis of Variance. Results of this analysis are shown in Table I.

Table 1

Analysis of Variance: Instructional Leadership Scale

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	P F EXCEEDED
MAIN EFFECTS	560.65	9	62.29	1.22	.282
LEVEL	248.37	2	124.18	2.44	.090
YRSEXP	172.31	3	57.43	1.13	.338
YRSCERT	158.78	3	52.92	1.04	.375
SEX	41.71	1	41.71	.82	.366
2-WAY INTERACTIONS	2079.23	26	79.97	1.57	.048
LEVEL YRSEXP	521.73	6	86.95	1.71	.121
LEVEL YRSCERT	253.85	6	42.31	.83	.545
LEVEL SEX	21.53	2	10.76	.21	.809
YRSEXP YRSCERT	562.74	7	80.39	1.58	.144
YRSEXP SEX	58.53	3	19.51	.38	.764
YRSCERT SEX	76.24	2	38.12	.75	.473
3-WAY INTERACTIONS	256.87	6	42.81	.84	.538
LEVEL YRSEXP YRSCERT	178.02	4	44.50	.87	.479
LEVEL YRSEXP SEX	106.33	2	53.16	1.04	.353
EXPLAINED	2896.76	41	70.65	1.39	.079
RESIDUAL	7504.84	148	50.70		
TOTAL	10401.61	189	55.03		

Examination of Table I reveals that some difference was suggested in the frequency of instructional leadership performance between grade level principals. However, these differences were not significant at the .05 level ($F=2.44$, $P<.09$). No other main effects or interactions approached significance. Because sample size is crucial to the power to detect group differences, and because 26 returned responses did not contain enough information to be useable in a multi-factor ANOVA but did indicate level, a one way ANOVA (scale by level) was performed. This increased the responses to 65 elementary, 72 junior high and 80 senior high principals' scale scores. Results of this analysis

demonstrated that no significant difference existed between principals at various levels ($F=2, 216=.91, P=.40$) in their performance of instructional leadership behaviors. Means and standard deviations, the standard errors, and the .95 confidence interval are presented in Table II. The 95% Confidence Interval around the means included only two points, thus indicating the chance of finding a difference between the means was relatively high.

Table II

One-way ANOVA

Instructional Leadership Scale: ns, Means, Standard Deviations, Standard Error, C.I.

GROUP	n	MEAN	STANDARD DEVIATION	STANDARD ERROR	.95 CONFIDENCE INTERVAL
Elementary	65	55.476	7.903	.9804	53.518 to 57.435
Junior High	72	55.597	8.339	.9828	53.637 to 55.556
Senior High	80	57.012	7.041	.7873	55.445 to 58.579
TOTAL	217	56.082			

The Cochran's C and the Bartlett-Box F Tests for homogeneity of variance were performed; the assumption of homogeneous variances was found acceptable.

Principals' responses to the item requesting percentage estimates of time spent on business management were analyzed in a 4 factor ANOVA (level, years experience, years certified and gender). Time responses were tallied in 4 categories: 1-24%, 25-49%, 50-74%, 75-100%. No significant differences were found in time spent on business management by principals at various levels ($F=2.03, P=.13$), at various years of experience ($F=1.30, P=.50$), at various years certified ($F=.79, P=.50$) or between genders ($F=3.79, P=.50$). No significant interactions were noted.

Principals' responses to the item requesting percentage estimates of time spent on instructional leadership behavior were analyzed in a 4 factor ANOVA (level, years experience, years certified and gender).

Time responses were tallied in 4 categories: 1-24%, 25-49%, 50-74% and 75-100%. No significant differences were found between principals at the three levels in amount of time spent on instructional leadership ($F=.73$, $P=.48$). A significant difference was noted for years of experience ($F=5.06$, $P<.00$). Results of the Newman-Keuls multiple comparisons procedure showed that the 25 principals who had 17 or more years of experience reported they spent more of their time on instructional leadership than did less experienced principals. No other significant main effects were noted for years certified ($F=1.27$, $P=.28$) or gender ($F=1.17$, $P=.28$); no significant interactions were found.

It was interesting to note that the most experienced principals did not show a difference from the others on the 21 item instructional leadership task frequency assessment; however, they reported they spent more time on instructional leadership than did the other principals. An examination of the strategies they cited as effective for improvement of instruction showed that as a whole, this group seemed to define instructional leadership more broadly than did the questionnaire. Examples of their responses citing effective instructional improvement strategies included: "Working with department heads," "treating teachers as professionals," "holding faculty meetings," and other similarly non-specific strategies. One principal responded by stating, "Everything I do is instructional leadership."

Qualitative Findings

Principals reported a wide variety of instructional leadership strategies in response to the open-ended question, "What do you find to

be the most effective strategy for the improvement of instruction in your building?" These responses were grouped into eight categories, presented in order of cited frequency:

1. Teacher Support: Opportunities and Rewards

The strategy principals at all levels listed most frequently for the improvement of instruction was reflective of facilitative leadership. Teacher support and strategies included giving teachers opportunities to assume leadership roles and providing opportunities for professional growth. Leadership roles were encouraged by delegating responsibility to teachers, providing opportunities for change, and, at the secondary level, by strengthening the department chair role to include teacher observation and evaluation. Principals facilitated teachers' opportunities for professional growth by arranging for release time to attend conferences and workshops, by providing needed resources, and by arranging for common planning periods among department or grade level members.

Teacher support was also shown by principals giving rewards to teachers. Examples of rewards included lending discipline support, showing personal interest, providing recognition before peers or community, and giving private praise and encouragement to teachers. These strategies were used by an approximately equal number of principals across all grade levels.

2. Classroom Observation

Teacher observation was cited as a powerful tool used by principals at all levels for the improvement of instruction. Aside from the traditional form of principal-teacher observation, teacher-teacher and teacher-principal observation were used as instructional improvement strategies.

More elementary principals facilitated peer observation (teachers observing teachers) than did secondary principals. However, these observations usually occurred outside the teacher's own building (i.e., teachers sent to observe other "experts" or new curriculum programs). Only three principals reported using peer observation within their own buildings.

Several principals reported the direct practice of demonstrating teaching methods and models to teachers in a variety of subject areas or settings. In some instances, principals demonstrated techniques they themselves had used as teachers, while in other cases, the principal shared teaching techniques he or she had observed in other classrooms within the building.

The most common form of observation cited was the usual principal-teacher observation. Secondary principals relied upon this type of observation more than did elementary principals.

3. Inservice and Staff Development

An approximately equal number of elementary, junior and senior high principals reported the use of inservice activities for instructional improvement. The most common strategy consisted of using external consultants to conduct the sessions. In only four cases (at the elementary and junior high levels) did principals report personally conducting the inservice; whenever this occurred, the principal had a specific technique to share with the staff, e.g., mastery learning, circle of knowledge or Madeline Hunter's clinical supervision model. Only one principal reported using his or her own staff members to present the inservice.

4. Group Planning and Interaction

Principals used faculty discussion as a vehicle to foster participatory management or collegial interactions around instruction. In comparison to their colleagues at other levels, senior high principals reported heavy reliance on communicative strategies that brought their faculties together; meetings were held with committees, departments or the whole staff to solve problems, set objectives and assess progress. Teachers were involved in the decision-making process, with principals reportedly incorporating their suggestions.

Elementary and junior high school principals reported the use of team planning and team teaching to improve instruction. One junior high principal facilitated instructional planning that involved teachers from various disciplines. At the senior high level, teams of teachers were involved in self-studies on curriculum needs within the building.

5. External Events

At both secondary levels, principals reported a comparatively higher reliance on events not initiated directly by themselves or their staffs to improve instruction; they tended to rely on these events more than did their elementary colleagues. Secondary principals cited their involvement in the North Central school assessment process most frequently. Elementary principals listed dependence on teachers' workshop attendance and implementation of new reading, math or computer programs to improve instruction.

6. Evaluation and Conference

Only 5% of the principals reported teacher evaluation as a method used for instructional improvement. In most cases, this meant teacher evaluation by the principal, but some reported evaluation of teachers

by themselves, by students, or by parents as effective for instructional improvement. None of the principals reported instructional improvement through use of teachers' evaluations of the principal's performance.

Principals also reported holding individual conferences with teachers about instruction (following the principal's observation) as effective for instructional improvement. These conferences were reported to be held both in conjunction with and independent of the evaluation process. One junior high principal reported a continual conferencing process as effective by giving specific feedback, observing and conferencing in a series repeated with individuals throughout the academic year.

7. School Climate Programs

Five percent of the principals reported use of a school climate improvement process within a diagnostic-prescriptive model to impact instruction. Diagnosis relied on the use of school climate assessment instruments administered to faculty, students, administration and parents. Prescription involved the use of results to implement activities for school climate improvement. This strategy was cited more often by senior or junior high principals than by elementary principals.

8. Clinical Supervision

Only 4% of the principals reported use of clinical supervision as an instructional improvement tool. This strategy was used more often by elementary and junior high school principals than by their senior high colleagues.

Summary and Conclusions

Our results conflicted with Firestone and Herriott's (1982) conclusions regarding possible differences between elementary and secondary principal behavior. Results of our quantitative analysis showed no significant difference in the performance frequency of instructional leadership tasks (identified by previous literature) between principals at various grade levels. Years certified and gender did not influence this frequency. Principals with 17 or more years of experience reported that they spent significantly more time on instructional leadership than did less experienced principals. As a group, more experienced principals appeared to define instructional leadership more broadly than did the questionnaire. There was no significant difference between principals at various grade levels in time spent on business management.

Results of qualitative analysis showed that principals at all levels most frequently relied on facilitative leadership, providing teacher support in the form of opportunities and rewards. Classroom observation ranked second as a strategy to improve instruction. These two activities represented over 50% of principals' most effective instructional improvement strategies. Secondary principals tended to rely more on external events, while elementary principals relied more on peer observation. Least-used strategies included clinical supervision, teacher evaluation and school climate programs.

Our findings support the concept of facilitative leadership behaviors identified by Firestone and Herriott (1982). However, both elementary and secondary principals used facilitative strategies as their primary means of instructional improvement. Secondary principals

were not unique in relying upon indirect methods of instructional leadership.

As consistent with previous literature (Krajewski, 1978; Roe and Drake, 1974; Goodlad, 1976) we find a discrepancy between normative and descriptive behavior. Particularly innovative or highly skilled strategies (e.g., clinical supervision, school climate audits, demonstration teaching) are not widely used by principals at any level. The reasons have been explained by a lack of preparation or support (California State Legislature, 1978), demands of other responsibilities (Roe & Drake, 1974), and lack of understanding and intent (Erlandson, 1980).

Our study suggests that a principal's assignment to either the elementary or secondary level neither causes nor prevents the assumption of the instructional leadership role. Secondary principals can take an active and direct role in instructional improvement without modifying their behavior by relying exclusively on facilitative leadership strategies. What makes one principal a strong instructional leader and another not may be more dependent on factors like self and community expectations, motivation, and previous experience, than on organizational factors such as staff size and departmentalization. Results of our research offer timely encouragement to secondary principals before reduced expectations become self-fulfilling prophecies.

References

- Awender, M. Different View on the Principal's Role. Phi Delta Kappan, 55, April, 1978, 562-563.
- Berman, P. and McLaughlin, M. Federal Programs Supporting Educational Change. Vol. 7, Implementing and Sustaining Actions. Santa Monica: The Rand Corporation. 1978.
- Blumberg, A. and Greenfield, W. The Effective Principal: Perspectives on School Leadership. Boston: Allyn and Bacon, 1980.
- Bossert, S.T., et. al. Five Principals in Action: Perspectives on Instructional Action. Far West Laboratory, 1983.
- Bossert, S.T. The Instructional Management Role of the Principal. Educational Administration Quarterly, Summer, 1982, Vol. 18, No. 3, p. 34.
- Brieve, F. Secondary Principals as Instructional Leaders. NASSP Bulletin, 56, December, 1972, 366-368.
- Carmine, D., Gersten, R. and Green, S. The Principal as Instructional Leader: A Second Look. Educational Leadership, 12, 1982, 47-55.
- Carvetti, G. Training for Effective School Administrators, Educational Leadership, 2, 1982, 324-329.
- Cogan, M. The Principal and Supervision, Principal, 53, 4, 1974, 20-24.
- Edmonds, R. Programs of School Improvement: An Overview. Educational Leadership, 12, 1982, 4-11.
- Erlandson, D. The High School Principal's Impact on Classroom Learning Activities. Denver, Colorado: CFK Ltd. Research Report, October, 1980.
- Firestone, W. and Herriott, R. Prescriptions for Effective Elementary Schools Don't Fit Secondary Schools. Educational Leadership. 1982, 51-53.
- Goodlad, J. A Study of Schooling: Some Implications for School Improvement. Phi Delta Kappan, 64, 8, 1983, 552-558.
- Goodlad, J. Principals are the Key to Change. Educational Digest, 42, November, 1976, 32-35.
- Henckley, S., McCleary, L. and McGrath, J. The Elementary School Principalship. New York: Dodd, Mead and Co., 1970.
- Johnson, B. and Sloan, C. A Study of Elementary School Principal's Self Perceptions of Change Agent Behavior. Procedures for Adopting Educational Innovations/CBAM Colleague Report, Texas

- University, Austin Research and Development Center for Teacher Education, August, 1977.
- Klopf, G. Developing the Role of the Elementary School Principal as an Educational Leader in The Principal and Staff Development in the Elementary School, Princeps Series, Occasional Paper No. 4, Bank Street College of Education, New York, 1974.
- Knezevich, S. Administration of Public Education. New York: Harper & Row, 1962.
- Krajewski, R. Secondary Principals Want to be Instructional Leaders. Phi Delta Kappan, 60, September, 1978, 65.
- Lewis, A. and Miel, A. Supervision for Improved Instruction. Belmont, California: Wadsworth Publishing Co., 1972.
- Lipman, H. Instructional Leader or Administrative Robot? NASSP Bulletin, 56, no. 363-365, April, 1972, 19-23.
- MacKenzie, G. and Corey, S. Instructional Leadership. New York: Teachers College, Columbia University, 1954.
- Mahan, J. The Teacher's View of the Principal's Role in Innovation. Elementary School Journal, University of Chicago, April, 1970, 359-365.
- Ried, R. School Principals: Leaders or Managers? July, 1977, ED 145 518.
- Roe, W. and Drake, T. The Principalship. New York: McMillan, 1974.
- Sause, E. Demonstrating Competency as a Principal, NASSP Bulletin, 58, no. 383, September, 1974, 19-26.
- Sacramento Assembly, The School Principal: Recommendations for Effective Leadership. California State Legislature, September, 1978, ED 165 325.
- Sarason, S.B. The Culture of the School and the Problem of Change. Boston: Allyn & Bacon, 1971.
- Sciara, F. The Change Agent Role of the Elementary Principal Re-examined. December, 1973, ED 084 678.
- Sergiovanni, T., Burlingame, M., Coombs, F. and Thurstone, P. Educational Governance and Administration, Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1980.
- Sharpes, D.K. Promoting Academic Achievement in Secondary Schools. NASSP Bulletin, January 1983, p. 8-11.

Vick, W. Leader, Innovator, Dreamer, Worker. Instructor, 84, August, 1971, 35.

Weldy, E. Principals: What They Do and Who They Are. Raiston, Virginia: National Association of Secondary School Principals, 1979, ED 170 892.