This review of 12 survey research studies on teacher supervision completed between 1941 and 1969 attempts to identify and interpret critical factors in supervisory performance, while also suggesting specific components of these factors. The research findings reported indicate at least three required areas of competence for effective supervisory performance. These areas include human relations, technical competence, and managerial ability. It is suggested that factor analytic studies of supervisory behavior may help to identify conceptual and performance dimensions of supervision, which can then provide the basis for the construction of sound programs of supervisory preparation. (Author/RT)
SUPERVISORY BEHAVIOR IN EDUCATION:
A Report of Survey Research

Richard F. Neville
AERA, February 1971
University of Maryland
Baltimore County
SUPERVISORY BEHAVIOR IN EDUCATION:
A Report of Survey Research

I. Introduction

Supervisors in education are consistently identified as instructional leaders. Past and recent publications of the Association for Supervision and Curriculum Development have emphasized this attribution. These publications have attempted to detail the major elements of the supervisor's role, while recognizing that the sum of elements converge in the notion of the supervisor as instructional leader. The instructional leadership motif is an idealized interpretation of the supervisor's role in education. Part of this interpretation is the assumption that the presence and performance of educational supervisors does have a positive influence upon the effectiveness of teachers. It might be more productive if this assumption was treated as a hypothesis to be tested in contrast to a valid description of supervisory behavior. It is frequently stated, for example, that supervisors will promote better decision-making by teachers, that through their efforts curriculum study and articulation of the school's program would be accomplished. These dimensions of responsibility are only samples of the anticipated results of supervising efforts. They are drawn out of what seems to be an unending list of functions and activities for which supervisors, it is claimed, are responsible.

At present, educators and schools, as complex social systems, are being pressed to increase their services and over-all effectiveness. As a result, there is a great need for efficient supervisory performance. Related

1 ASCD. The Supervisor: Agent for Change in Teaching. James Rath and Robert Leeper, Editors. 1966
3 ASCD. Supervision: Emerging Profession, Robert Leeper, Editor, 1969
to this need is the recognition, or more correctly the assertion, that existing programs of preparation for supervisors are noteworthy in their poor record of enabling supervisors to gain the competence required if they are to provide the instructional leadership.

The overview of survey research on educational supervision which follows, is presented with the intent of stimulating discussion as to the more precise nature of supervision, and the analysis of preparation programs for educational supervisors. Such study may provide a foundation for the design and implementation of preparation programs, which will cause supervision as instructional leadership to emerge.

II. Points of Focus.

The major points being emphasized in this brief report relate to (findings) drawn out of selected survey research on supervisory programs in education. The shortcomings of these efforts are recognized. It is also recognized that these efforts and the findings generated from them are best thought of as a starting point for more sophisticated efforts in the analysis of supervisory progress and the performance of supervisors. Reasonably speaking, however, it is important to determine the present character of efforts in educational supervision, if action is to be taken to make the ideal real. This analytic step is also necessary if new perspectives are to be considered for inclusion in programs designed to prepare individuals for the job of instructional leadership.

Major Points:

1) That the idea of supervision as instructional leadership generally exists, as an ideal which is only vaguely understood and infrequently acted upon.
2) That the clearest operational definition of supervision is expressed as component elements which consist of supervisory practices, procedures, and conditions. In this framework, a classroom visit by a supervisor may be conceived of as a supervisory practice. The visit may be guided by diverse procedures, and both the practice and procedures are expressed under pervasive conditions such as open-closed climate, mutual respect, or the physical context.

3) That studies of supervisory programs in education indicate statistically significant differences between the perceptions (reactions) of teachers to the existing versus desired levels of use of supervisory modes which purport to contribute to instructional leadership.

4) That there have been significant differences in the recorded levels of use between teachers and supervisors and between teachers and principals concerning the application of particular supervisory modes. (practices, procedures, conditions), (Neville, Stewart)

5) That correlation tables of items contained in the various survey studies (Dull, Neville, Stewart) suggested a cluster relationship among the items. When the existing scale of teacher responses was factor analyzed, six factors, which accounted for 58 per cent of the total factor variance, were identified. (Stewart)

6) That factor analytic studies of supervisory behavior in education may provide the basis for the construction of sound programs of supervisory preparation. Preparation programs should be based upon the major "factors" or areas of supervisory performance which are directed toward instructional improvement. The work of Mann, as reported in Leadership and Productivity, is significant in the study of these matters. Survey information collected by Doyle is presented, since it is related to Mann's three proposed factors of supervisory competence; human, technical and managerial.

---


III. Review of Survey Studies in Educational Supervision.

In 1941 J. B. Whitelaw\(^1\) reported upon his research entitled, "Criteria for Evaluating the Effectiveness of Supervision". After a study of the literature and practice of the time, Whitelaw clarified what he felt to be the essential components of supervision. After isolating these components, he proposed a number of questions relative to each. These questions had their roots in the basic assumptions of the democratic philosophy of supervision. The categories identified by Whitelaw were: the Supervisor, the Teacher (in terms of personnel) and Philosophy, Curriculum, Materials and Evaluation (in terms of program). A school system building a series of criteria in these areas could gather the necessary data for the evaluation of its supervisory program.

Henry Antell\(^2\) in 1945 reported on his study entitled: "Teachers Appraise Supervision". He culled ideas from the literature, interviewed teachers and supervisors, and isolated twenty-five of the most common practices of supervision. Teachers were asked to signify whether the practices comprising the questionnaire were very helpful (VH), of little help (LH), of no help (NH), or actually detrimental (AD), no contact (NC). The results of the teachers appraisal showed the following twelve practices as being (VH), very helpful by over 50\% of the group of respondents:

---


\(^{11}\) J. B. Whitelaw, "Criteria for Evaluating the Effectiveness of Supervision", Educational Administration and Supervision. January 1941. p. 29-38

1. Availability of professional library in school.......................... 86%
2. The supervisor acts as a consultant or technical advisor........ 81%
3. Demonstration lessons...................................................... 74%
4. Grade conferences to discuss common problems.................... 74%
5. Visiting an outstanding school......................................... 73%
6. Participation in the formulation of school policies............... 70%
7. Individual conference with supervisor............................... 67%
8. Intervisitation.............................................................. 67%
9. An after-school conference at which there is open discussion of a topic of vital interest to the group.................. 65%
10. In-service courses or workshops........................................ 63%
11. Participation in course-of-study making............................ 56%
12. Teachers' interest committee in the school......................... 51%

Teachers identified the following activities as being detrimental to the supervisory program:

1. Rigid adherence of each teacher to a fixed daily program........ 65%
2. Formal observation by supervision whenever he sees fit........ 20%
3. The supervisor stays away from the classroom as much as possible.................................................. 15%
4. A daily 2-second visit by the supervisor............................
5. Commendation for outstanding service to Board of Education at end of term.................................................. 10%
6. Formal observations by supervisor only on call................. 7%
7. A comprehensive testing program and a supervision with analysis and interpretation of results...................... 6%
8. A teacher-conducted conference after school.................... 3%
9. A daily morning bulletin to teachers............................... 2%

P. M. Bail\textsuperscript{13} compared the type of supervision which teachers desire with that which they receive. Some 460 educators were interviewed. His findings were as follows:

<table>
<thead>
<tr>
<th>Type of Supervision Received</th>
<th>Frequently</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular Inspection Only</td>
<td>185</td>
<td>40.2</td>
</tr>
<tr>
<td>Very Little</td>
<td>137</td>
<td>29.2</td>
</tr>
<tr>
<td>No Supervision</td>
<td>118</td>
<td>25.7</td>
</tr>
<tr>
<td>Democratic, Helpful</td>
<td>20</td>
<td>4.1</td>
</tr>
<tr>
<td>Total</td>
<td>460</td>
<td>99.4</td>
</tr>
</tbody>
</table>

\textsuperscript{13}P. M. Bail. "Do Teachers Receive the Kind of Supervision They Desire?" Journal of Educational Research. May 1947. p. 713-716
An analysis of the information as interpreted by Bail is the following:

1. Teachers desire most frequently supervision which provides constructive, new techniques and methods, demonstration teaching, suggested materials, and equipment.
2. Teachers do not receive from supervision the services which they desire.

Harmes reviewed completed research relating to the "process" or democratic view of supervision. He suggested that this perspective of supervision has three underlying assumptions upon which there is available research data. They are: (1) If both the supervisor and the teacher are going to be working on the teacher's problems, they will arrive at a more common perception of those problems. (2) The supervisor and the teacher will arrive at a more common perception of the best methods for arriving at solutions to the teacher's problems. (3) Teachers working in small groups, with a supervisor as consultant, will improve their teaching.

Harmes summarized his review of research pertinent to the so-called democratic approach to supervision by stating: (1) A difference of perception between teachers and supervisors does exist concerning the nature of problems confronting teachers; (2) Differences of perception between supervisors and teachers exist concerning methods of dealing with the problems which teachers have; and, (3) It has not been demonstrated that the use of small group techniques is either the most effective or the most efficient method of helping teachers improve.

Wayne Palmer\textsuperscript{15} studied the supervisory services teachers are receiving and compared them with their desires. He also compared these findings with the statements of elementary school consultants and principals as to the type and frequency of supervising services being received by the teachers surveyed.

A generalized statement indicating the major findings of Palmer's study is as follows:

1. Teachers do want supervision of the right kind. Teachers want the cooperative, participatory, democratic type. They want help rather than answers for their problems.
2. Teachers desire supervisors who are sympathetic, understanding, and democratic. The supervisor's attitude is considered to be of more importance than the services he renders.
3. A more effective inter-school visitation program is highly desirable.
4. Better professional library facilities are desired.
5. More demonstration teaching is wanted by teachers.
6. Beginning teachers appear to desire and need a somewhat different type and extent of supervisory service than required and desired by experienced teachers.

Carolyn Guss\textsuperscript{16} reported on a study in 1961. The study was undertaken by the Indiana ASCD Research Committee. Its purpose was to investigate the perceptions held by teachers, parents, university faculty and, school administrators concerning supervision.

\textsuperscript{15}Wayne Palmer, "A Study of Existing and Desired Supervisory Services in the Indianapolis Public Schools". Unpublished Doctor's Thesis, Indiana Univ. 1955

\textsuperscript{16}Carolyn Guss, "How is Supervision Perceived?" Educational Leadership, Vol. 19, No. 2 November 1961. p. 99-102. Communication from Dr. Guss will be found in the appendix.
An open-end opinionnaire was devised and forwarded to 50 representatives of each participating group. The participants were a randomly selected stratified sample. The responses of 139 individuals were analyzed by the research committee of the IASCD. The findings were reported by categorizing the expressions of the different groups. Summaries of these findings are as follows:

Administrators: The function of supervision is that of improvement of instruction. The most important contribution is curriculum development. Goals of supervision should be more clearly defined so that supervisory effectiveness can be improved.

Principals: The function of supervision is that of helping the teacher achieve the most effective learning situation. The least important contribution is that of doing the teacher's work, and the effectiveness of supervision would improve if there were a better understanding between teachers and supervisors.

University Faculty: The function of supervision is to facilitate the work of teachers and help improve the learning situation; emphasis should be placed on curriculum development, mechanical routine activities must be de-emphasized or completely dropped. Supervisors should be mighty concerned with the human relations role they play and the human powers they wield. They should be trained and inclined to help teachers reach their highest potentials.

Parents: In replies from parents, four functions of the supervisor received equal emphasis—passing on new materials and methods to teachers, visiting classrooms, supervising teachers, and developing a curriculum to meet the needs of the community. Teacher guidance and assistance is their most important contribution. Generally there were no suggestions for improvement and the more common definition of supervision was to oversee, check, compare and help.

Supervisors: The function of supervision is helping teachers to improve instruction. The individual conference with the teacher is very valuable, while clerical jobs are least important. Suggestions for improvement include more clerical help, more supervisors, and closer relationship between supervisors and principals.

Teachers: They tended to want to avoid being the object of supervision. Some of them considered supervision as an attack on them personally. Others thought of supervision as a program dealing with materials, ideas and schedules rather than with the teaching-learning situation as it affects personal relationships.
"In 1960 Dull developed a comprehensive instrument listing 473 supervisory behaviors which were evaluated by a national panel of supervisory leaders. These criteria were organized into six general areas of supervisory concern. The areas were: (1) Philosophy and Objectives for the Supervision Program, (2) Organization and Structure for the Supervision Program, (3) Leaders in the Supervisory Program, (4) Relationships of Supervisory Leaders, (5) Activities of Supervisory Leaders, and (6) Provision for Appraisal of Supervisory Leaders and the outcomes of the Supervision Program. The instrument was administered in eighteen Ohio schools. Nine schools were rated by a jury from the Ohio Department of Education as having strong supervisory programs and nine were rated as having weak supervisory programs. It was concluded that 244 of the criteria could be used to discriminate strengths and weaknesses of a supervisory program." (8 p.27)

The Dull instrument for the evaluation of supervisory programs was the primary source for the instrumentation used in the Neville (6) and Stewart (8) studies which are to be introduced shortly. This instrument was developed in the following steps:

1. Tentative outline of the evaluative criteria was submitted to ten supervisory leaders in Ohio for their critical evaluation.

2. Pertinent literature, from state departments of education, and superintendents of schools, on supervision was gathered. A study was also made of texts, research, and periodical literature which related to supervision. From this investigation of related literature, tentative criteria were organized.

3. The criteria were divided into appropriate categories and sent to 156 national leaders in educational supervision for their appraisal. Items were included in the final draft of the evaluative criteria on the basis of the evaluation by the supervisory leaders. One hundred and twenty of the supervisory leaders returned the evaluations.

4. The final version of the criteria was so organized. It was then field tested in 18 different school systems in 18 different counties of the State of Ohio. Some 244 items were discriminating and were recommended for further application and analysis. (6, n.63)

Hallberg studied actual and expected behaviors of supervisors in Oregon as perceived by supervisors, superintendents, principals, and teachers.

The following major points were concluded in the Hallberg study:

1. The supervisory role is expected to and it was concluded that the supervisors in Oregon did emphasize the human relations aspect of supervision.

2. The supervisors were not meeting the expected functions related to the consultant aspect of supervision.

3. Administrative and clerical duties were not considered to be a desirable aspect of the supervisory role.

4. Supervisors in Oregon were expected to and were practicing passive rather than forceful leadership as determined by the ratings of the items comprising the questionnaire.

5. There were evidences of contradictory expectations of the supervisory role.

6. There did not appear to be cooperative planning included as a part of the supervisory programs.

7. Some of the differences in role expectations were potential sources of role conflict and of misunderstanding as related to supervisory programs.

A study by Cox and Lott\(^\text{18}\) concerning perceptions of the supervisory role was reported in *Educational Leadership*. A Q sort of one hundred descriptions of supervisory behavior was submitted to supervisors, principals and teachers. An analysis was made of the "most liked" and "least liked" behaviors of an ideal supervisor. Divergence in opinion was expressed concerning some of the behaviors ranked high by the different groups. Supervisors indicated with a high rank that the cooperative efforts of a group were more effective than

efforts of individual members. Supervisors also placed the items implying that they "have the know-how" in the "least liked" category. However, the other three groups ranked the items relating to supervisor competence in teaching and curriculum work as having considerable significance for effective supervision. It was noted that all groups ranked highest those behaviors which related to a belief in people and a respect for the individual. It was concluded that the overlapping of interest in the area of human relations activities would tend to minimize the major differences identified in the study. (Stewart pp.32-33)

Neville (6) conducted a study in Connecticut concerning the supervisory function of the elementary school principal. An eighty-six item instrument, adapted from the criteria developed by Dull, was used in the study. Teachers in eight schools rated the supervisory behaviors of the elementary principal on an existing and desired scale. The findings were as follows:

1. The schools, representing groups of teachers which participated in the study, viewed supervision in distinctly different ways.
2. The questionnaire as utilized did make it possible to discriminate the views of supervision as stated by the different schools, or groups of teachers.
3. Male teachers viewed the supervisory function of the elementary principal in a significantly different way than the female teachers.
4. The participating schools did not agree on the level of existing use by principals of the supervisory practices included in the study.
5. Grade level teaching assignments did not effect the teachers' perceptions of the principal as supervisor.
6. The tenure status of teachers did not effect their perceptions of the principal as supervisor.
7. Elementary school principals are not implementing certain supervisory practices and procedures to the extent desired by teachers.

In 1966 Neville (7) reported a study in Maryland using the same instrument. A random sample of elementary school teachers was asked to respond to the behaviors listed in the instrument as they related to supervisory programs.
The purpose of this study was to secure the reactions of elementary teachers to general procedures, practices, and conditions of supervision, as specified in the evaluative criteria. In compiling and analyzing the results, it was possible to compare the desires of teachers regarding supervisory services with their perceptions of the reality of these services. The responses of teachers (N=224) did indicate statistically significant differences between existing and desired levels of use. Following this study, Stewart (9), employing essentially the same instrumentation, collected data from teachers (elementary, secondary), supervisors and principals. These groups responded to both an existing and desired level of use on the criteria. A partial report of Stewart's findings follows:

1. The perceptions of supervisory behavior expressed by elementary teachers in Maryland between 1965 and 1968-69 did not show any statistically significant changes.

2. Teachers, supervisors, and principals indicated an agreement as to the relationship of their response patterns on the items comprising the instrument.

3. Supervisors and principals both consistently recorded higher levels of use on the existing use than did teachers.

4. The differences between correlations on the desired scale suggested that the responses of teachers, supervisors and principals might be viewed as on a continuum with the teachers at the low end, principals toward the middle, with responses of supervisors higher on the continuum scale. Hence there was greater agreement between the teacher and principal than between teacher and supervisor as to the existing application of the supervisory practices included in the instrument used in this study.

5. Stewart subjected his data on the existing scale to factor analysis. He was able to identify six factors. They were interpreted as human relations, administration, conceptualization, and three technical skill factors (leadership, curriculum development, evaluation). There was agreement between teacher and supervisor responses for the human relations and technical factors. There were differences between teachers and supervisors on the administrative factor. Stewart reported, "The lack of relationship between teacher and supervisor responses to the items comprising the administrative factor suggested that these items accounted for much of the variance in the perceptions of teachers and supervisors". (p. 121)
Some of the items comprising these factors may be of interest: (See Stewart (8), 1969 pp. 96-103)

Factor I--Human Relations Skills

<table>
<thead>
<tr>
<th>Variable</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is a helpful-friendly relationship between supervisor and staff</td>
<td>.807</td>
</tr>
<tr>
<td>They are both objective and human, placing people as individuals foremost in their approach to supervision.</td>
<td>.796</td>
</tr>
<tr>
<td>They have a breadth of understanding based on experience in classroom teaching.</td>
<td>.792</td>
</tr>
<tr>
<td>They regard themselves as co-workers with the teachers in decision making.</td>
<td>.781</td>
</tr>
<tr>
<td>They exhibit frankness without being dominative.</td>
<td>.761</td>
</tr>
<tr>
<td>They encourage good human relations in their schools.</td>
<td>.749</td>
</tr>
<tr>
<td>Supervisory leaders are highly ethical and professional in their actions with co-workers.</td>
<td>.732</td>
</tr>
<tr>
<td>They are quick to recognize and commend the special merit of teachers with whom they work.</td>
<td>.714</td>
</tr>
</tbody>
</table>

Factor II--Technical Skills--Leadership

<table>
<thead>
<tr>
<th>Variable</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>The supervisory program enables professional staff to improve their school-community relations and understandings.</td>
<td>.630</td>
</tr>
<tr>
<td>Leadership is provided to bring about coordination of the school's educational program.</td>
<td>.596</td>
</tr>
<tr>
<td>He works with teachers to set up machinery for the continuous evaluation of the school program.</td>
<td>.575</td>
</tr>
<tr>
<td>The supervisory program provides for cooperative development of both immediate and long range curriculum plans.</td>
<td>.542</td>
</tr>
<tr>
<td>Through in-service education teachers and supervisors become more adept at meeting the educational needs of youth.</td>
<td>.524</td>
</tr>
<tr>
<td>The supervisory visit is an attempt to learn the needs of both teachers and pupils.</td>
<td>.505</td>
</tr>
</tbody>
</table>

In all, ten items were reported on Factor II.
### Factor III--Technical Skills--Curriculum Development

<table>
<thead>
<tr>
<th>Variable</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers are involved in curriculum development on the basis of their interests, and needs of the school.</td>
<td>.602</td>
</tr>
<tr>
<td>Opportunities are provided for faculty to visit selected schools and to attend curricular conferences.</td>
<td>.542</td>
</tr>
<tr>
<td>The focus for curriculum development is the needs of the individual school.</td>
<td>.535</td>
</tr>
<tr>
<td>Teachers participate in the planning and organization of their meetings.</td>
<td>.419</td>
</tr>
<tr>
<td>Teachers are encouraged to assume leadership positions.</td>
<td>.454</td>
</tr>
</tbody>
</table>

Factor III accounted for 5.35 per cent of the total variance. The factor was comprised of five items, four of which received high item loadings. The items were related to curriculum development and were identified as Technical Skills.

### Factor IV--Technical Skills--Evaluation

<table>
<thead>
<tr>
<th>Variable</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>The evaluation system reflects the spirit of in-service development and not that of inspection.</td>
<td>.640</td>
</tr>
<tr>
<td>The plan for evaluation of teachers is cooperatively evolved.</td>
<td>.578</td>
</tr>
<tr>
<td>The evaluation plan is a guidance procedure, directed at helping the teacher help himself teach more effectively.</td>
<td>.576</td>
</tr>
<tr>
<td>The procedures used relate to the findings of research.</td>
<td>.531</td>
</tr>
<tr>
<td>Practical help is given new teachers in keeping and filling out reports and records.</td>
<td>.476</td>
</tr>
<tr>
<td>To the extent possible, other staff are involved in the selection of new staff.</td>
<td>.434</td>
</tr>
</tbody>
</table>
Factor V--Administrative Skills

<table>
<thead>
<tr>
<th>Variable</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study committees are organized so that divisions such as grade levels are represented.</td>
<td>.605</td>
</tr>
<tr>
<td>Committees of teachers are organized for the improvement of teaching resources (community, school equipment, personnel and instructional materials).</td>
<td>.599</td>
</tr>
<tr>
<td>Organization of staff for instructional improvement is democratically arranged.</td>
<td>.578</td>
</tr>
<tr>
<td>School policies and procedures are clarified for teachers by the supervisory staff.</td>
<td>.564</td>
</tr>
<tr>
<td>Curriculum committees are organized to allow staff to consider instructional problems.</td>
<td>.559</td>
</tr>
<tr>
<td>Job expectations and relationships that should exist are understood by professional staff.</td>
<td>.520</td>
</tr>
</tbody>
</table>

Factor VI--Conceptual Skills

<table>
<thead>
<tr>
<th>Variable</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is continuous evaluation of the instructional program.</td>
<td>.544</td>
</tr>
<tr>
<td>There is a free flow of communication in terms of ideas, information, opinions and constructive criticism.</td>
<td>.541</td>
</tr>
<tr>
<td>Adequate time is allocated to the supervision of instruction.</td>
<td>.483</td>
</tr>
<tr>
<td>Adaptation of the school program to the needs of the individual class and student is encouraged.</td>
<td>.473</td>
</tr>
<tr>
<td>The organization of the supervisory function is changed as the needs of the situation are modified.</td>
<td>.456</td>
</tr>
<tr>
<td>A mutual level of responsibility exists between supervisor and staff for the improvement of instruction.</td>
<td>.447</td>
</tr>
</tbody>
</table>

The sixth factor identified accounted for 5.61 per cent of the variance. All six items had high loadings and were identified as contributing to the structure of the factor. These items were classified as Conceptual Skills.
IV. The Supervisory Skill-Mix Concept

The importance of generating these factors is underscored in comparing their composition with those discerned some time ago by organizational theorists in the discipline of sociology. In writing about the leadership role in formal organizations Floyd C. Mann (9) has written:

The preceding discussion of the concept of supervisor has direct implications concerning the essential skills that a supervisor must have. To perform the functions required to coordinate the activities of one organizational family with another, the supervisor must have administrative competence. To integrate organizational objectives with individual member needs, he must have human-relations competence. To accomplish his other assigned tasks, including the performance of technical operations, he must possess technical competence. (p. 73)

To summarize briefly, there are three classes of skills which supervisors need to perform in their key role in the formal organization--technical skills, human-relations skills, and administrative skills. Technical skills pertain to "know-how" competence regarding particular tasks or activities for which the supervisor is responsible. Human-relations skills concern the understanding of organization members as people with their own problems and needs, and the understanding of the emotional and motivational dimensions of interpersonal relations. Administrative skills deal with the coordinative and integrative activities required for the attainment of the objectives of the total organizational system. Thus, the three kinds of skills concern tasks, people, and organization, respectively. (p. 75)

It is of some interest and import to note the similarity of the major factor skill-areas cited by Mann and those offered by Stewart in his recent analysis of supervisory behavior in education. These complimentary reports suggest that effective leadership by supervisors in formal organizations is related to the skill and competence expressed by the supervisor in the human, technical and managerial (administrative, Stewart) dimensions of the supervisory role. It is implied that the specifics of these dimensions, particularly in the technical dimension, may vary from one supervisory context to another. The identification of the components of each dimension must be established if supervisors are to perform in accord with the organization's needs and
thereby contribute to its degree of effectiveness.

In line with the tri-dimensional (Skill-mix) description of critical factors defined by Mann is a recent report by Doyle. (10) He attempted to assay the relative importance that teachers and supervisors attribute to administrative, technical, and human relations skills as they relate to the supervisory process in the field of education. An anonymous questionnaire was distributed and returns were obtained from sixty teachers and twenty supervisors. The purpose of the questionnaire was to tap the opinion of both teachers and supervisors to determine if the supervisory role model elicited similar expectations both from within and between the two groups surveyed.

In general the teachers stated that supervisors are at their best when functioning administratively; they also suggest that this is how supervisors perceive their own optimum area of skill competence. Supervisors however, believe that technical skill is their forte and they perceive themselves as a group to be at their best when functioning in this skill area. One implication of this role discontinuity is that teachers may not look for technical assistance from their supervisors because they (teachers) do not view the supervisory role in this light.

Forth seven percent of the teachers and thirty eight percent of the supervisors believe that supervisors view themselves as least adequately equipped in human relations skills. These results are presented in Table 3B. There does not appear to be a clear cut consensus on the part of supervisors as to their own deficiencies in terms of the skill mix. The teachers are similarly as divided as the supervisors in their responses to the same question.