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ABSTRACT

This study examines the possible relationship between principals' administrative behaviors and pupil reading achievement. Administrative interns assigned to 40 New York City schools during the 1973-74 school year observed principals' decision-making behaviors over a continuous period of 40 school days. Principals' behaviors were described in terms of four categories linked to Griffith's decision-making theory. Based on Griffith's theory, it was predicted that principals who emphasized appellate (conflict resolution) decisions and intermediary (school management) decisions rather than creative (educational program and staff development) decisions would be likely to head schools with below-norm average reading achievement. Findings of the study showed that, on the average, the 40 principals devoted less than 10 percent of their time to creative matters. As predicted, 35 of the 40 schools reported 55 percent or more of their pupils with below-norm achievement scores. (JG)

BROOKLYN COLLEGE
OF THE
CITY UNIVERSITY OF NEW YORK
SCHOOL OF EDUCATION



# URBAN PRINCIPALS' ADMINISTRATIVE BEHAVIOR IN RELATION TO PUPIL READING ACHIEVEMENT

by

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Final Report (A)
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FOREWORD

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## SUMMARY

Can the level of pupils' achievement in reading be associated with their principals' administrative behavior? This study examines the possible relationship of principals' administrative behaviors to their schools' pupil reading achievement. These principals' behaviors are described in terms of four categories linked to Griffiths' decision-making theory:

| | | |
|---|---|---|
| (EP) | educational program | (creative decisions) |
| (SD) | staff development | (creative decisions) |
| (CR) | conflict resolution | (appellate decisions) |
| (MS) | management-of-the-school | (intermediary decisions) |

Griffiths' theory leads us to predict that when principals' administrative behaviors show major emphasis on the creative (the EP: educational program, and the SD: staff development) decision-types, they are likely to be supervising schools with at or above grade norm average reading scores. On the other hand, when principals place major emphasis on the appellate (the CR: conflict resolution) and the intermediary (the MS: management-of-the-school) decision-types they are likely to be heads of schools with below grade norm average reading scores.

Findings

This study of 40 New York City principals found that the total of their creative (EP and SD) administrative behaviors accounted for less than 10% of their time; the total of their appellate and intermediary (CR and MS) behaviors for more than 90%.

The predictable depressed pupil reading achievement scores for the schools headed by these principals were found to be confirmed. Of the 40 schools supervised by these principals, 35 (87.5%) reported 55% or more of their pupils to be achieving below grade norm at time of testing.

Of these 35 schools, 24 (68.6%) reported that 70% or more of their pupils were functioning below grade norm.

Suppose these principals were able to commit 90% of their time to creative administrative behaviors (types EP and SD) -- would an upward trend in pupil reading achievement develop? We do not know. The model's theory base does, however, provide a rationale for the systematic generation of hypotheses to explore the relationship of different patterns of principals' administrative behaviors to pupil reading achievement.

From a group of 51 administrative behaviors identified in this study, sub-sets of related competencies may be derived and be applied to administrator education. While these behaviors are not universal or definitive, they are illustrative of how field-based feedback may be used to guide the design of performance-based preparation programs in educational administration.

## Introduction

Among the breakthroughs needed to identify effective administrator behavior is that of advancing a testable rationale to guide the collection and interpretation of data. Given this theoretical ambiguity, little in the way of consensus has thus far been produced.[1,2,3] The aim of this article is therefore to demonstrate just such an explicit theorizing effort. Griffiths' decision-making theory was selected as a framework through which urban principals' administrative behavior may be studied in relation to pupil reading achievement.

The operation of a feedback system utilizing field observation for the periodic updating of field-centered information on these behaviors to programs of preparation in educational administration is described. The theory based model used to identify these behaviors (from which if so desired sub-sets of competencies may validly and reliably be derived) was the first step in the design of a field-centered performance based curriculum for the Advanced Certificate Program in Educational Administration and Supervision, School of Education, Brooklyn College of the City University of New York, leading to New York State principal's certification.[4]

Feedback from the field should, however, aim to describe and perpetuate only effective current administrative practice by its institutionalization in preparation programs. Accordingly, the research issues addressed in this study are whether or not principals' administrative behavior can be objectively 1) recorded and reliably fed back to college curricula and 2) found to be linked to predictable levels of pupil achievement in reading.

How can Griffiths' decision-making theory provide a testable rationale to guide the collection and interpretation of data on principals' administrative behavior?

The Theory: Proposed Link Between Leader Behavior and Organizational Results

Griffiths believes that the central function of the administrator of any organization is to make decisions. It is in the decision-making process that administrative behavior occurs. Thus the writer perceived any given decision-making behavior as the locus of a cluster of interrelated competencies belonging to that behavior. The idea that it is an administrative behavior (and not its component "competencies") which is the smallest observable unit in real life stands up when it is overlayed by a review of Griffiths' three types of organizational decisions and their implications for predicting pupil achievement. These three types of decisions are: intermediary, appellate, and creative.[5]

Intermediary decisions are those in which the administrator "follows orders" or fulfills policy directives. Too much time and energy in these decisions devoted to the enforcement of the rules and regulations of the organization may displace unduly this time, energy, and expertise from the tasks of providing leadership.

Appellate decisions are those which are required to settle disputes between or among subordinates. Griffiths postulates that the frequency of the occurrence of appellate decisions is an indicator of organizational health, viz., "too many" appellate decisions indicate rampant organizational conflicts which the administrator may or may not be helping to create. In any case, these conflicts must be handled and thus do tend to divert him or her from the pursuit of the primary goals of the organization.

Creative decisions are those which result in new policy or in needed adaptations of the organization's operation to changing situations. It may be hypothesized that the more an administrator is willing (or able) to commit time, expertise, and energy to creative decision-making the more likely it is that the achievement of the goals of the organization will take place. On

the other hand, the more time, expertise, and energy the administrator allots to the goal-diverting intermediary and appellate decisions (to the loss of opportunities for creative decisions) the less likely it is that the organization's primary goals are fulfilled.

Applying the Theory to the Statement of the Problem

The problem as formulated for this study therefore has two major components:

1. How can the pattern of the administrative behaviors of a group of urban principals be objectively and reliably described in theoretical terms?
2. How can the proposed link between this described pattern of administrative behaviors and the predicted pupil reading achievement scores theoretically associated with it be tested?

Observing Principals' Decision-Making

How was access to principals' decision-making behaviors to be achieved?

During the 1973-74 academic year, administrative interns were sponsored in each of 40 New York City schools. The principals supervising these interns arranged their schedules to enable the interns to observe all of these principals' formal and informal individual and group conferences. For the Fall 1973 term these scheduled hours of observation occurred during the 40 school days between October 1st and November 30th; for the Spring 1974 term, between March 1 and May 3rd. The interns were able to observe their principals on schedules which varied from one to ten hours per week. Different interns and cooperating principals participated each semester.

Noteworthy is that all of the cooperating principals have been given "satisfactory" end-of-year ratings by their respective superintendents for the 1973-74 school term. The grade distribution of the schools served by the interns is given in Table 1.

TABLE 1 - GRADE DISTRIBUTION
OF SCHOOLS HEADED BY OBSERVED PRINCIPALS
(Fall 1973, Spring 1974)

| Grade | Fall 1973 | Spring 1974 | Totals |
|---|---|---|---|
| High School | 4 | 2 | 6 |
| Junior High | 2 | 2 | 4 |
| Intermediate | 1 | 2 | 3 |
| Elementary | 11 | 16 | 27 |
| TOTALS | 18 | 22 | 40 |

These interns were oriented to the role of participant observer. During the first three weeks of each semester they were briefed intensively on the techniques of observing and recording data descriptive of their principals' decision-making behavior. Illustrative behaviors were presented in these briefings to help ensure inter-observer reliability. In addition, the writer conferred with the interns weekly during Internship Seminar to resolve problems of techniques as these arose throughout the periods of data collection. Specific emphasis was placed on the importance of interns' recording only the administrative decisions they witnessed during the agreed-upon periods of observation. Neither hearsay nor the decision-making behaviors witnessed by the interns during casual encounters with their principals were to be part of the record.

A recording form (See Figure 1.) was used by the interns to maintain their daily logs. The following data were to be recorded for each observed decision:

Column 1

-Who (role only) or what (event) stimulated the principal's need for a decision?

(E.g., a teacher's request, a parent's complaint, a fire in the building)

Column 2

-What was the content of the request (or stimulus)?

(E.g., the teacher requested assistance in class control)

Column 3

-What were all the factors (numbered) evident in (the principal's) reaching the decision?

(E.g., before deciding whether or not to assist the teacher the principal considered two (2) factors: 1) the teacher's experience in the school, 2) the principal's own availability.)

FIGURE 1. LOG RECORDING FORM

BROOKLYN COLLEGE / SCHOOL OF EDUCATION / ADVANCED CERTIFICATE PROGRAM IN EDUCATIONAL ADMINISTRATION & SUPERVISION

INTERN _____ , FIELD SUPERVISOR _____ SCHOOL _____
LAST NAME FIRST

| (1) WHO (ROLE ONLY) OR WHAT STIMULATED DECISION | (2) CONTENT OF THE STIMULUS FOR A DECISION (USE INFINITIVE) | (3) ALL THE FACTORS (NUMBERED) EVIDENT IN ARRIVING AT THE DECISION | (4) OUTCOME GRANTED (G) DENIED (D) POSTPONED (P) |
|---|---|---|---|
| | | | |
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| | | | |
| | | | |
| | | | |

TODAY'S DATE _____
(NEW DAY; NEW PAGE)

Column 4

-What was the outcome of the request (or stimulus) to the principal to make the decision; viz., was the request Granted (G), Denied (D), or Postponed (P)?

(E.g., the principal's agreement to assist the teacher in class control was recorded as G.)

Quantifying Administrative Behavior

Used to code the interns' logs was a taxonomy of administrative functions adapted from the University Council for Educational Administration (UCEA).[7,8] The UCEA taxonomy provides four recognizable areas of administrative functions to be used both to describe objectively the performance of principals in service as well as to relate the curricula of programs of preparation in educational administration to practice. The categories of this taxonomy are:

| | |
|---|---|
| Educational Program | (EP) |
| Staff Development | (SD) |
| Community Relations | (CR) |
| Management-of-the-School | (MS) |

Griffiths' view of administrative behavior as decision-making resulted in the first major adaptation of the taxonomy: the EP, SD, CR and MS administrative behaviors were defined as belonging to one of the three decision-types: creative, appellate, and intermediary. Analogies between these four administrative functions (with the second major adaptation, the CR of Community Relations was up-dated to mean the more contemporary CR of Conflict Resolution) and Griffiths' three theoretical decision-making types are discernible.

| UCEA Taxonomy (Adapted) | Griffiths' Theory |
|---|---|
| Educational Program (EP) | Creative Decisions |
| Staff Development (SD) | Creative Decisions |
| Conflict Resolution (CR) | Appellate Decisions |
| Management-of-the-School (MS) | Intermediary Decisions |

Accordingly, Griffiths' decision-making types (which apply to all types of organizations) were joined to the taxonomy for categorizing the administrative functions in school organizations.

The coding of the interns' logs required the initial identification of each observed decision as an EP, or SD, or CR, or MS type. Each type was then weighted by the number of all the factors (cf. Figure 1, Column 3) evident in the principal's arriving at that decision. To illustrate: an intern observed his principal deciding whether or not to provide assistance to a teacher (an SD type of behavior); considered by the principal were two factors: 1) the teacher's school experience, 2) the principal's own availability. This behavior was therefore coded as SD2. Reflected in a coding, therefore, are both the decision-type and its relative simplicity (e.g., 1 or 2 factors considered) or its complexity (e.g., 10 or 11 factors) in its demands on administrative time and expertise.

The criteria for the coding of the observed administrative behaviors into the EP type are given in Figure 2, for the SD type in Figure 3, for the CR type in Figure 4, and for the MS type in Figure 5.

Figure 2. CRITERIA FOR THE IDENTIFICATION OF (EP) EDUCATIONAL LEADERSHIP TYPE OF ADMINISTRATIVE BEHAVIORS (CREATIVE DECISIONS)

Origin

A. No evidence of a written or oral directive or request from any source including but not limited to

- Central Board
- District Office
- students
- parents
- teachers
- student teachers
- assistant principals
- paraprofessionals
- community members

B. Stimulus may be

- attendance at professional conferences
- college courses
- professional literature
- instructional models (intervisitation)

Content

To create instructional policy by

- identifying needed school goals
- introducing instructional programs, revisions or additions
- planning of different instructional groupings of pupils
- introducing the systematic evaluation of instructional programs

Figure 3. CRITERIA FOR THE IDENTIFICATION OF (SD) STAFF DEVELOPMENT TYPE OF ADMINISTRATIVE BEHAVIORS (CREATIVE DECISIONS)

| Origin | Content |
|---|---|
| A. Written, or oral directives from<br><br>-Central Board<br>-District Office | To provide to all staff members professional assistance through<br><br>-individual or group conference with self<br><br>-referral to a resource (person, place, or material) |
| B. Written, oral, or non-verbal requests from staff members including but not limited to<br><br>-teachers<br>-student teachers<br>-assistant principals<br>-paraprofessionals | on<br>-pupil assessment<br>-the selection and evaluation of learning materials<br>-methodologies and techniques<br>-classroom management<br><br>To approve or to disapprove the<br><br>-selection<br>-assignment<br>-evaluation<br>-separation<br>-transfer<br><br>of all staff members. |

A request which in origin and content is SD and which is also denied (D) on the basis of Central Board or District Office regulations is to be coded as MS.

Figure 4. CRITERIA FOR THE IDENTIFICATION OF (CR) CONFLICT RESOLUTION TYPE OF ADMINISTRATIVE BEHAVIORS (APPELLATE DECISIONS)

Origin

Written, oral or non-verbal stimuli may originate from

- -parents
- -teachers
- -assistant principals
- -paraprofessionals
- -security guards
- -Union Chapter chairperson or grievants
- -pupils (acting out)
- -community members

Content

To interpret and/or to modify school, District Office or Central Board policy

- -to resolve conflict between or among
  - -parents
  - -teachers
  - -assistant principals
  - -paraprofessionals
  - -security guards
  - -Union Chapter Chairperson or grievants
  - -guidance counselors
  - -pupils(acting out)

in the areas of

- -pupil discipline
- -pre-suspense and suspense hearings
- -Union Grievance Procedures (Step I)

Excluded are

instructional program matters as described under EP, and professional assistance matters, as described under SD.

Figure 5. CRITERIA FOR THE IDENTIFICATION OF (MIS)MANAGING-THE-SCHOOL TYPE OF ADMINISTRATIVE BEHAVIORS (INTERMEDIARY DECISIONS)

| Origin | Content |
|---|---|
| A. District Office or Central Board policy in the forms of:<br><br>-circulars<br>-memoranda<br>-letters<br>-oral requests | To implement, monitor and enforce school, District Office and Central Board policy in the areas of:<br><br>-school organization<br>-instruction<br>-scheduling |
| B. From any other source (to enforce school, District Office, or Central Board policy):<br><br>-parents<br>-teachers<br>-assistant principals<br>-paraprofessionals<br>-security guards<br>-Union Chapter Chairperson or grievants<br>-guidance counselors<br>-pupils<br>-community members<br>-custodial staff | -ordering of supplies, textbooks<br>-lunchroom scheduling and monitoring<br>-safety procedures<br>fire drills<br>security measures (including deployment of security personnel)<br>-accounting for school funds<br>-plant maintenance<br>-working conditions (e.g., as defined in the union agreement)<br>-record keeping:<br>student records on a per student basis and on school-wide basis<br>-staff records and personnel reports<br>-bussing<br>-attendance and lateness (pupil and staff) |

In order to pre-test the level of reliability of these criteria, a random sample of the interns' logs was independently coded by each of three research assistants. The results of this pilot coding are given in Table 2.

TABLE 2. FREQUENCY OF UNANIMOUS AGREEMENT AMONG THREE INDEPENDENT CODINGS OF A COMMON PORTION OF INTERNS' LOGS (Fall 1973, Spring 1974)

| | Agreement | Non-Agreement | Total |
|---|---|---|---|
| Observed | 71 | 25 | 96 |
| Expected | 48 | 48 | 96 |

The unanimous agreement (74%) among the three independent codings is significant at the .01 level using the Chi-Square test.

Findings: The Pattern of Principals' Behaviors in Relation to Pupil Reading Achievement

The types and frequencies of the observed administrative behaviors as recorded in the full set of the 40 interns' logs are given in Table 3.

TABLE 3. TYPES AND FREQUENCIES OF THE OBSERVED ADMINISTRATIVE BEHAVIORS OF 40 URBAN PRINCIPALS (Fall 1973, Spring 1974)

| | EP | SD | CR | MS | Total |
|---|---|---|---|---|---|
| Observed | 15 | 372 | 647 | 3011 | 4045 |
| Percent (Rounded) | <1% | 9% | 16% | 74% | 100% |

The distribution of the EP, the SD, the CR and the MS administrative behaviors is significant at the .01 level using the Chi-Square test.

This composite of the observed principals' behaviors sustains the conventional wisdom that urban principals commit most (74%) of their time, talent and energy to "following orders" (MS or intermediary decision-making behavior) or directives from authority. The next largest demands on them (16%) are in the resolution of conflicts between or among administrators, teachers, pupils, parents, and community (CR or appellate decision-making behaviors); slightly less than 10% was committed to creative decisions, i.e., to types EP or instructional leadership and SD or staff development.

Is there evidence to confirm the predicted link between the distribution of the administrative behaviors of the observed principals and their schools' reading achievement?

Griffiths' theory leads us to anticipate that principals who manifest greater involvement in the CR (appellate) behaviors and the MS (intermediary) behaviors are likely to be heading schools with depressed reading achievement scores. Clearly the observed principals were found to be significantly committed to CR and MS behaviors (totalling 90%) rather than to EP and SD behaviors (totalling 10%). Depressed pupil reading achievement scores in the schools they supervise are, therefore, likely also to be found.

Given in Table 4 is the distribution of the reading scores of the schools supervised by these principals.

TABLE 4. READING ACHIEVEMENT SCORES OF SCHOOLS SUPERVISED BY OBSERVED PRINCIPALS

| Per Cent of Pupils Achieving On or Above Grade | Number of Schools |
|---|---|
| 0 - 10 | 4 |
| 11 - 20 | 9 |
| 21 - 30 | 11 |
| 31 - 40 | 7 |
| 41 - 45 | 4 |
| 46 - 50 | 4 |
| 51 - 60 | 0 |
| 61 - 70 | 1 |

Of the 40 schools headed by the observed principals, 35 (87.5%) reported that 55% or more of their pupils were achieving below reading grade norm at time of testing. Of these 35 schools, 24 (68.6%) reported that 70% or more of their pupils were functioning below reading grade norm. The difference between the mean of these data (27.95%) and the national norm (50%) is significant at the .01 level.

The predicted depressed pupil reading achievement scores of the schools headed by the principals studied was therefore confirmed in this case.

The implications of this model (depicted in Figure 6) for the diagnosis and correction, or the reinforcement, both of principals' on-the-job performance and of the learning experiences of students in programs of administration are significant. The focus of future research suggests the systematic comparison of alternate patterns of principals' administrative behavior in relation to pupil reading achievement.

Random Selection of the Observed Administrative Behaviors

To obtain a representative sampling of the behaviors observed, the percent of the occurrence of each behavior in the total of 4045 observed administrative behaviors was calculated and applied to the development of a list of 50 behaviors. Of the 50, no EP behaviors were eligible to be selected; SD decisions accounted for 4, CR for 8, and MS for 38.

This process is summarized in Table 5.

TABLE 5. THE RELATION OF THE PERCENT OF THE OCCURRENCE OF EP, SD, CR AND MS BEHAVIORS TO THE BEHAVIORS RANDOMLY SELECTED FROM THE INTERNS' LOGS

| Administrative Behavior | % of Occurrence (Rounded) | Behaviors Eligible for Random Selection | | Totals |
|---|---|---|---|---|
| | | Fall '73 | Spring '74 | |
| EP | <1% | 0 | 0 | 0 |
| SD | 9% | 2 | 2 | 4 |
| CR | 16% | 4 | 4 | 8 |
| MS | 74% | 19 | 19 | 38 |
| TOTALS | 100% | 25 | 25 | 50 |

Although the EP's less than 1% of occurrence meant none was eligible for selection, one such behavior is included as an illustration in the listing of the (now) 51 administrative behaviors given in Figure 7.

FIGURE 6. THE MODEL FOR THE UTILIZATION OF INTERNS' FEEDBACK OF THE OBSERVED DECISIONS OF BUILDING PRINCIPALS

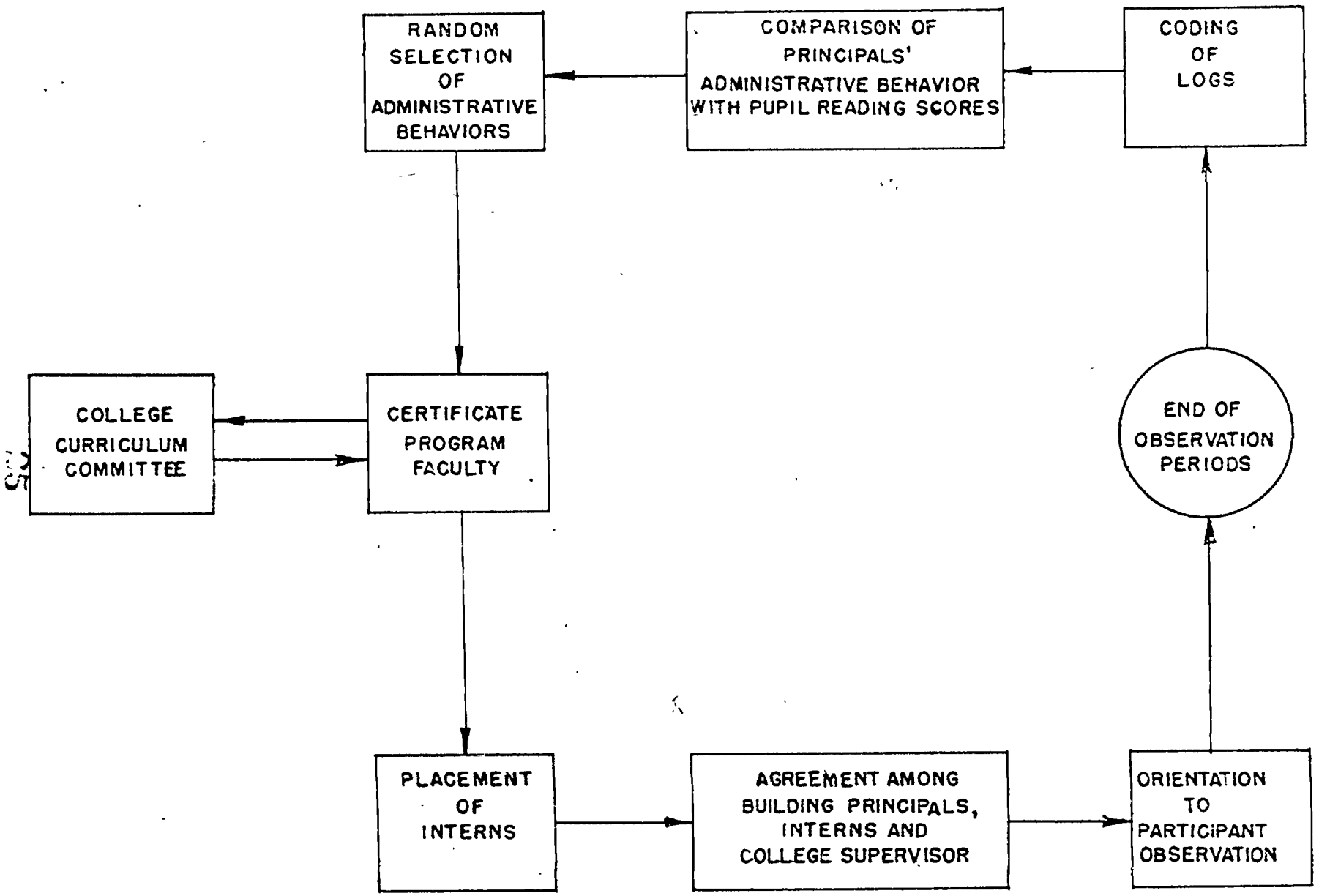


Figure 7. FIFTY-ONE ADMINISTRATIVE BEHAVIORS OF URBAN PRINCIPALS (FALL 1973, SPRING, 1974)

EP

1. To organize a self-contained classroom on the secondary school level

SD

1. To observe a lesson taught by a teacher
2. To conduct a post-observation conference with a teacher
3. To plan and lead a group conference with teachers to demonstrate new instructional materials
4. To assist substitute teachers in classroom management

CR

1. To involve parental cooperation in improving a child's conduct in school
2. To determine the alternate class placement of an acting-out child
3. To respond to a parent's request for a specific class placement of a child
4. To respond to a parent's request to make a teacher available for an unscheduled guidance conference
5. To arrange for the collection of data required for a pupil suspension hearing
6. To respond to reports from a security guard about pupils fighting in a classroom
7. To confer with the school Parents' Council on school policy
8. To order library and text books which reflect community norms

Figure 7. (cont'd)

MS

1. To formulate goals and objectives for the next academic year
2. To lead a meeting of assistant principals to communicate school district and central board policy decisions
3. To publish a calendar of daily events
4. To publish an end-of-year calendar
5. To schedule departmental and grade staff conferences
6. To organize school-wide subject area fairs
7. To distribute courses of study and curriculum bulletins to staff members as needed
8. To analyze the results of school-wide standardized tests to determine pupil instructional needs
9. To organize a school-wide standardized testing program
10. To replenish textbooks for the next academic year
11. To communicate guidelines for the reorganization of classes for the next academic year
12. To schedule assembly programs
13. To interview persons volunteering to assist in classroom instruction
14. To establish cooperative working relationships with community social service agencies
15. To establish a format and routines for teachers' reporting of pupil attendance on a daily basis
16. To evaluate and arrange the discharge of long-term absent pupils
17. To plan the follow-up of pupil lateness
18. To enforce guidelines for the release of an ill child to go home
19. To secure medical attention for a child injured in school
20. To schedule fire drills in accordance with legal requirements

Figure 7. (cont'd)

MS

21. To schedule teachers to supervise pupils in the lunchroom

22. To establish and enforce procedures for safe pupil entrance and dismissal

23. To fulfill the requirements of the teachers' union agreement as to filling vacant compensatory time positions

24. To fulfill the requirements of the teachers' union agreement as to class coverage by subject area specialists

25. To fulfill the requirements of the teachers' union agreement as to upper limit of class enrollment

26. To fulfill the requirements of the union agreement as to auxiliary educational personnel

27. To lead in the development of a dress code by teachers

28. To recruit substitute teachers

29. To divide up the class of an absent teacher when no substitute teacher is available

30. To evaluate the request by a teacher for the approval of medical expenses for an alleged line-of-duty accident

31. To implement the security policy on school visitors

32. To arrange the distribution and the collection of teacher data request forms (New York State)

33. To screen fund-raising appeals to the staff from private agencies

34. To respond to the school custodian's request that teachers cooperate with the custodial staff

35. To plan a program to prevent vandalism

36. To establish procedure for scheduling teachers' use of the school auditorium and gymnasium

37. To program and monitor the instructional bell schedule

38. To determine alternative exits and entrances during school's modernization

## Conclusions and Directions for Further Research

Described is a field observation model to examine the relationship of urban principals' administrative behaviors to the pupil reading achievement of the schools they head. These principals' behaviors are described in terms of four categories linked to Griffiths' decision-making theory:

| | | |
|---|---|---|
| (EP) | educational program | (creative decisions) |
| (SD) | staff development | (creative decisions) |
| (CR) | conflict resolution | (appellate decisions) |
| (MS) | management-of-the-school | (intermediary decisions) |

The model's theory base provides the rationale for the systematic generation of hypotheses to explore the relationship of different patterns of administrative behaviors to pupil reading achievement. Specifically, Griffiths' theory leads us to predict that principals whose administrative behaviors show major emphasis on the creative (the EP: educational program, and the SD: staff development) decision-type are likely to be supervising schools with at or above grade norm average reading scores. On the other hand, principals who place major emphasis on the appellate (the CR: conflict resolution) and the intermediary (the MS: management-of-the-school) decision-types are likely to be heads of schools with below grade norm average reading scores.

This study of 40 New York City principals found that the total of the creative (EP and SD) decision-type accounted for slightly less than 10% of their administrative behaviors; the total of the appellate and intermediary (CR and MS) decision-types for slightly more than 90%. Depressed reading scores were therefore predictable.

The predicted depressed pupil reading achievement scores for the schools headed by the principals studied was confirmed.

Of the 40 schools supervised by the observed principals, 35 (87.5%) reported that 55% or more of their pupils were achieving below grade norm at time of testing. Of these 35 schools, 24 (68.6%) reported that 70% or more of their pupils were functioning below grade norm.

Suppose the reverse were true -- and these principals committed 90% of their time to creative administrative behavior (types EP and SD) -- would an upward trend in pupil reading achievement develop? We do not know. The formulation of the problem in these terms does however suggest an extension of this study. To be produced would be an objective and valid instrument to diagnose and to correct, if necessary, the performance both of future principals preparing for certification and of principals in service.

From the 51 administrative behaviors identified by this study may be derived sub-sets of related competencies which are applicable to administrator education. These behaviors are not intended to be universal or definitive. They are, however, illustrative of field-based feedback which may be produced by this model to guide the design of performance-based programs of preparation in administration and supervision.

NOTES

[1]Terry Barraclough. Administrative Evaluation, Educational Management Review Series, ERIC Clearinghouse on Educational Management, University of Oregon, Eugene, Oregon, April 1973, Number 15. EA 004 805.

[2]Robert T. Stout. New Approaches to Recruitment and Selection of Educational Administrators, University Council for Educational Administration, The Ohio State University, Columbus, Ohio, 1973, p. 33.

[3]Carmen M. Culver and Gary Hoban (eds.) The Power to Change: Issues For the Innovative Educator. New York: McGraw-Hill, 1973, pp. 35 and 47.

[4]Frederick F. Cuttitta. "Competency-Based Certification: Problems and Prospectives." Abstracts of the Northeastern Educational Research Association (D.H. Paulus, ed.) 1973, p. 52.

[5]Daniel E. Griffiths. Administrative Theory. New York: Appleton-Century-Crofts, 1959, pp. 92-113.

[6]Frank W. Lutz and Laurence Iannaccone. Understanding Educational Organizations: A Field Study Approach. Columbus, Ohio: Charles E. Merrill Publishing Company, 1969, pp. 97-129.

(continued)

## NOTES

[7]Monroe City Simulation Materials, Instructor's Manual, Janus Junior High School Principalship Simulation. University Council for Educational Administration, The Ohio State University, Columbus, Ohio, 1971, p. 17. Excerpted from: Ray Cross and Vernon S. Bennett, Problem Situations Encountered by Principals in Different Socioeconomic Settings. A speech presented at the 1969 Annual Meeting of the American Educational Research Association (AERA), February 1969, Los Angeles, California.

[8]John K. Hemphill, Daniel E. Griffiths, and Norman Fredericksen. Administrative Performance and Personality. New York: Teachers College, Columbia University, 1962, pp. 46-55.

oriented budget.

It is usually necessary to prepare a budget document that summarizes cost estimates for each project resource type. This is the typical line item budget with entries for personnel, materials and supplies, equipment, travel, services and indirect costs. This type of budget is needed if the school district customarily budgets in the line item format. If outside funding for the implementation project is sought, the necessary proposal document may require both a typical line item budget and an estimate of the cost of each project task and/or mission.

The completion of the budget documents completes the planning phase of an implementation project. The information and documents generated in this phase, taken together, constitute the project plan. This plan should be submitted to the school board or appropriate authority for review and approval. Upon approval of the plan, the project moves into the preparation phase.

The superintendent and/or other central office administrators and principals can help the project manager with cost estimation and budgeting by supplying any cost information they may possess and by reviewing the final proposed budget.

## Preparing for Implementation

The preparation phase is the second phase of the project management process. The activities involved in the preparation phase of an implementation project are: (1) obtain staff, (2) train staff, (3) orient persons not directly involved, (4) obtain, distribute and install materials and equipment, (5) arrange for the use of facilities, (6) develop evaluation plan, (7) obtain or develop measurement instruments, and (8) develop an information system for control of project operations. The first seven of these

activities were discussed in the previous planning phase section of this supplement. This section is devoted to a discussion of the development of an information system for an implementation project.

Successful operation of an implementation effort, once underway, depends to a great degree upon the project manager and staff knowing both what should be happening, what is actually happening and who should make it happen. This is usually accomplished with a procedure or operation commonly identified as a project information system. A project information system consists of three components -- the project data base, organizational charts, and the project handbook. Each of these components is discussed in the sections which follow.

Project Data Base

The basic function of the project data base is to accumulate in one place all of the initial schedule, budget, and task performance decisions made during project planning. This permits the project manager to have ready access to the basic or initial planning decisions which reflect what should be happening and who should be making it happen.

Some of the types of information that should be included in the data base for an implementation project are listed below.

- o statements of the project goal and objectives
- o descriptions of the project tasks
- o the work breakdown structure
- o the work flow diagram
- o the task time schedule
- o identification of milestones

- o resource requirements
- o the budget and expenditure plan

All performance, time, and cost data that have been generated for each project task and for the total project should be included. For example, if one of the tasks is "train teachers", then the following information regarding the task would be part of the data base:

- o the instructional objectives
- o how the training will be accomplished
- o who will do the training
- o who will be taught
- o when the training will take place
- o where the training will take place
- o what resources are required
- o what dollar costs will be incurred
- o how it will be known when the training task is completed

With this kind of detailed information, the project manager can monitor the training process and know if it is deviating from what was planned.

Organizational Charts

The second component of the project information system involves the development of a project organizational chart. The function of an organizational chart is to show authority and responsibility for project staff and to show reporting channels for the flow of information.

Consider an implementation project such as the implementation of IPI Reading in an intermediate size school district "X". Suppose that the district has decided to implement the program in grades one through six in five

buildings (A, B, C, D and E), representing different types of student populations from different neighborhoods. Also, suppose the district's Coordinator of Elementary Education has been chosen to coordinate or manage the implementation. A suggested organizational chart for such an implementation project is pictured in Figure #6.

In order to help clarify project authority and responsibilities, a management responsibility guide is often developed. The guide is a useful device in preventing project tasks from being overlooked because no one is charged with the authority or responsibility for their execution. A sample portion of a possible management responsibility guide for the IPI Reading implementation project described above is pictured in Figure #7.

## The Project Handbook

The purpose of the project handbook is to facilitate staff operation and communications. The handbook should contain such items as: (1) general background information regarding the project and its environment or setting, (2) the project organizational chart, (3) reporting formats and schedule, (4) staff meeting schedules, (5) travel arrangement information, and (6) project task schedules.

In implementing IPI Reading, for example, the project handbook might include the following:

- o the names of the schools involved in the project
- o the grade levels involved
- o a project staff directory
- o a project organizational chart (like the one in Figure #6)
- o the project management responsibility guide (like the one in Figure #7)

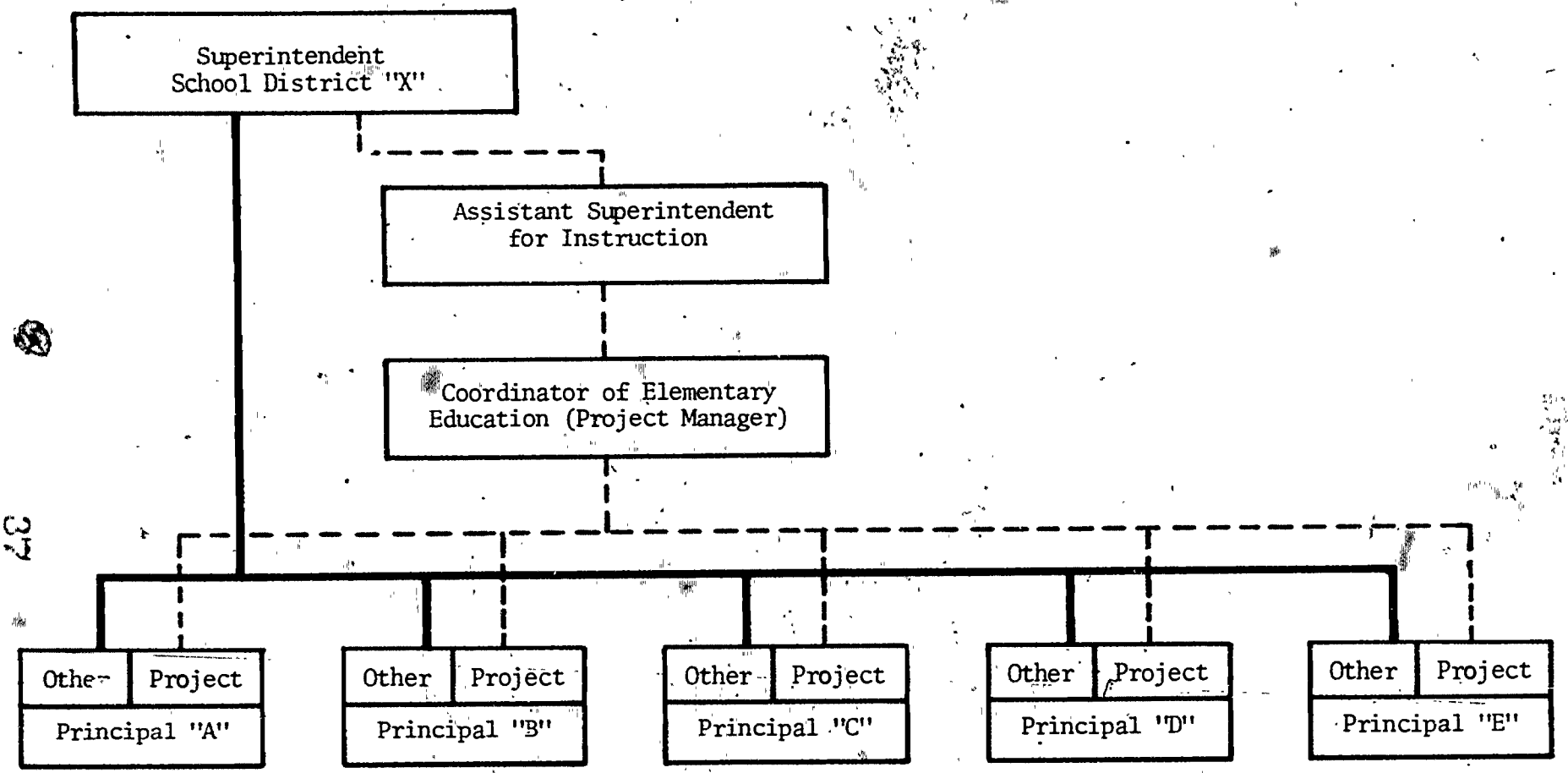



Figure #6--Suggested Organizational Chart for IPI Reading Program Implementation Project

POSITION TITLES

| TASK DESCRIPTIONS | Coordinator of Elementary Education (Project Manager) | Building Principals | Elementary Teachers | Aides | RBS Consultants |
|---|---|---|---|---|---|
| Train Teachers | G | O | | | Y |
| Order Materials | G, O | S | | | Y |
| Instruct Pupils | G | G | O | S | Y |

RESPONSIBILITY RELATIONSHIP CODES

| Code | Meaning | Explanation |
|---|---|---|
| G | General Responsibility | Individual guides and directs execution of the function through the person delegated operating responsibility and has approval authority over the function. |
| O | Operating Responsibility | Individual is directly responsible, at the operating level, for execution of the function. |
| S | Specific Responsibility | Individual is delegated responsibility for execution of a specific or limited portion of the function. |
| Y | May Be Consulted | Individual may be called in to confer, relate information, render advice or make recommendations. |

Figure #7 - Sample Portion of a Possible Management Responsibility Guide for an IPI Reading Program Implementation Project.

- o the format for reports that are to be submitted by the building staffs to the project manager
- o the schedule for submitting reports to the project manager
- o the schedule for the Planning Sessions
- o details regarding travel and accommodations for the staff training session in the summer
- o the schedule for the training session
- o the schedule for the arrival of materials and equipment at the school buildings

Copies of this handbook should be distributed to all members of the project staff. As project activities move along, it is likely that the handbook will need some modifications or additions in order to be kept current. For example, in IPI Reading implementation, information and procedural modifications made during the Planning Sessions should be added to the handbook. Therefore, project handbooks are often kept in loose-leaf form.

## Implementation Operations

The operations phase is the third phase of the project management process. The project activities that occur in the operations phase of the implementation project are: (1) orient the pupils to the procedures of the new program, (2) instruct pupils under the new program, (3) disseminate information regarding the operation of the program, (4) modify the program content and/or procedures, (5) administer measurement instruments, (6) score and analyze evaluation data, and (7) synthesize the data and report the evaluation results. Each of these activities has been discussed previously in the section entitled "Planning Implementation." The concern of this section is with the monitoring and control function that must be performed in

order to ensure that these activities of the operations phase are performed properly.

Regardless of the best planning and preparation efforts, operations do not always go as planned. Thus, the project director must have a system or procedure for knowing the status of the project at all times. The project information system discussed in the previous section is useful in this regard.

The monitoring and control of project operations is basically a problem-solving process consisting of the following steps: (1) the identification of a problem, (2) the generation of alternative solutions and selection of a most desirable solution, (3) the implementation of the desired solution and the communication of changes in operations to the project staff and other affected offices. This three-step process is repeated throughout the operations phase of the project.

In almost any implementation project, it can be expected that some significant problems will occur. These problems are discovered by comparing progress reports on the actual operation of project activities with the project plan. The progress reports may be formal or informal, written or oral, and should be tailored to the needs of each implementation project. For example, in implementing IPI Reading, a school district may want to use a modification of the monitoring instrument "SIGNS", developed by Research for Better Schools, Inc., as a basic reporting procedure. By using this instrument, a school district can collect information on the operation of an IPI program that is needed in order to decide if the implementation is going according to plan.

The following example will help to illustrate the three-step monitoring and control process as it operates in an implementation project. Assume again that an intermediate-size city school district is implementing IPI Reading

in grades 1-6 in five school buildings (A, B, C, D and E). Also, suppose th. project manager (Coordinator of Elementary Education) and building supervisors (principals) are using the "SIGNS" instrument as a basic reporting device on a periodic basis. In addition, the project manager and principals have developed other procedures for monitoring different aspects of the implementation. For example, they have developed a materials inventory control system that allows them to know the type and numbers of materials in stock in each building and to compute the rate of consumption on a monthly basis.

Implementation had begun in September and it is now the first week in November. The project manager is reviewing the progress reports submitted to him by the five building principals. The principal of Building C indicates in his materials inventory report that his school is beginning to run low on some of the materials in the Primary Reading Program (grades 1-3). He asks whether or not this is to be expected.

The project manager immediately compares the inventory figures of School C with those of Schools A, B, D and E and discovers that C has a substantially lower stock of Primary Reading Materials than the other schools. This condition still may not represent a problem. The project manager next examines the sch l profile for School C contained in the SIGNS instrument report. From this profile he finds that many more pupils in School C have units of work yet to be completed in Primary Reading than there are materials for. The first step of the problem-solving control process has been completed -- a problem has been identified.

The next step in this process is to generate alternative solutions to the problem and to select a best, or most desirable, solution. It is usually

necessary to determine the cause of a problem before effective solution alternatives can be generated. Therefore, the project manager's next step is to work with the principal of School C and his staff in determining why the school has run short of primary reading materials. A recheck of the initial inventory, purchase orders and school reading achievement levels indicates that the correct number and type of materials were ordered, received and distributed to the school. Further investigation leads the project manager and principal to an examination of the placement of pupils into IPI Reading in September based upon their pre-test performance. This examination reveals that many of the fourth and fifth grade pupils were placed in the IPI Reading Program at a level that is conventionally termed a second or third grade reading level. Some of this was expected based upon previous school-wide reading achievement test data. Further investigation indicates, however, that many of these pupils are new to the school, having moved into the school's attendance area during the summer. Such mobility is not uncommon in this part of the city. Thus, the cause of the problem appears to be a combination of some previous inaccuracy in the measurement of reading achievement levels in the school plus an influx of low reading achievement pupils during the summer months. This information forms the basis for discussing alternative solutions for the shortage problem. It will also be helpful in avoiding similar problems in the future.

Next, the project manager and his staff must specify the ends or results they want to achieve by a solution to the problem, and then generate alternatives that will meet those specifications. They specify that School C must have certain numbers of particular materials within ten school days. They would like to minimize cost and still obtain high-quality materials that are easy to read and use.

They begin to generate alternatives such as: (1) order the needed materials, (2) make copies of the needed materials, (3) borrow the materials from other schools, and (4) borrow the needed materials and order replacements for the other schools. They then compare each alternative with the needs or musts and the likes previously specified. The first alternative is rejected because the ordering, shipment, and distribution of materials will take longer than the required ten school days.

The second alternative may work, although the cost of copying and assembling materials will be high, and the quality of the product may be less than desirable. Also, there is the question of the legality of copying the materials for large-scale use. Thus, the second alternative does not appear to be very favorable to them.

The third alternative is rejected because, if School C borrows materials from the other schools, they will then run out of materials.

The fourth alternative satisfies all the specified needs, in that School C will get the needed materials within ten school days and the other schools will receive replacement copies before they run out of materials. This alternative also satisfies the like's, in that the cost will be minimal and the quality of the materials obtained will be equ : to that of the present materials. Thus, they choose the fourth alternative over the second. The second step in the problem-solving control process has been completed.

The final step in the control process is to implement the chosen solution and communicate the changes involved to the project staff and appropriate school administrators. There are a number of details that must be worked out in order to implement the decision that the project manager and principals have chosen. For example, the following questions must be answered: "What materials will be borrowed? How many copies of each will be borrowed? How

many copies will the different schools lend? Who will be responsible for getting the materials together in each school?

The transport of these materials between the school buildings will require certain authorizations and directions. In addition, the order for the replacement materials must be placed rapidly. This may require special efforts on the part of the project manager in facilitating the processing of the order form and purchase order by several district offices or departments. The cooperation and support of various central office administrators is necessary for the smooth implementation of corrective action in solving project operational problems.

After the solution has been implemented, the project manager follows up on the implementation to ensure that it has gone according to plan. He checks to see that School C has received the needed materials from each of the other schools, and he checks to see that the shipments of replacement materials has been received when expected. The final step in the problem-solving control process, solution implementation, has now been completed.

This three-step process of monitoring and controlling project operations continues throughout the operation of the project. In the example above, it may happen that the school profiles at the end of the first semester show that pupils in one of the better schools (in terms of reading achievement) are not showing the expected gains under the new program. Pupils there may even appear to be improving their reading skills at a level comparable to that in the "average" schools. Such a finding might lead the project manager and building principal to observe classroom activities and procedures more carefully than they normally might. As a result, they might discover a hard-to-find problem, such as a lack of individualization of student learning prescriptions. Teachers may be having many pupils complete all instruc-

tional materials, thereby not individualizing the instruction of the pupils and slowing down the learning of the more able students. As a result, the quality and speed of pupil learning suffers.

The development and operation of a monitoring and control system is an absolute necessity when implementing any new instructional procedure or program. A reporting system that makes effective project monitoring and control possible must be carefully designed.

## Terminating Implementation

The termination phase is the fourth and final phase of the project management process. Project termination is concerned with the ending of the project effort. In most cases this involves either the phase-out (closing-out) of the project or the transition of the project into an on-going, regular school program. In some cases this transition itself is large, complex, and uncertain enough to be treated as a project. An implementation project can be thought of as such a project. That is, an implementation project is a project whose concern is with the transition of a program from the status of a trial program to that of an on-going sub-program within the overall instructional program of the school. Thus, by definition, the ending or termination of an implementation project represents the final stages of transition, rather than any phase-out or ending of project activities. Most of the operational activities continue, but they continue as regular program activities.

An implementation project may be in operation for any reasonable length of time. If an implementation begins in September, a school district may decide to run the project for one year. That is, the new instructional program is to be considered as part of the regular program when school begins

the following September. Or, the district may decide that the implementation of a particular program will require two or three years. Whatever the case, when the time comes for the ending of the project and the beginning of the on-going, regular program, there are certain tasks that need attention. Among these are informing project personnel of final transition procedures; preparing a final report for the funding source (school board, state department of education, etc.); retaining important records, reports and similar documents; writing a project history for reference by future project directors; and planning the first year of operation as a regular program. These tasks are discussed below.

## Inform Project Personnel

All project staff should be informed of any changes in program operations that will come about as a result of the ending of project status. For example, in implementing IPI Reading, a district may decide to use fewer or more teacher aides the next year, or schedule class sessions in both the mroning and afternoon so that full-time personnel may fill the aide role as well as part-time personnel.

Project staff members also must be informed of their roles in the final transition tasks, such as preparing the project history or planning for the following year.

## Prepare the Final Report

The school board and the public should receive a final report on the project's successes and failures. If the implementation project was funded by an outside source, that funding source will certainly require a final

report. The final results of the new program's evaluation will be an important part of the final report. Recommendations for the program modification and improvement should also be included.

The superintendent and/or other central office administrators should carefully review the project final report. This is especially important if the project involved the use of funds from outside the district.

## Retain Important Records and Documents

Whether or not the project was funded by an external source, certain records and documents should be retained. For example, items such as expenditure records, personnel records, correspondence noting major project changes, progress and final reports, and summary test data should probably be retained. For example, in implementing IPI Reading, the retention of student reading achievement data in each school building is necessary for accurate planning, and for ordering the correct amounts of the various materials for the following year. Also, the analysis of personnel records may provide information on what type of experience and training is likely to make good teacher aides. Such information will be invaluable when it comes time to implement another new program, such as IPI Science.

The project manager may want the advice of certain central office administrators in determining which records and documents are required by the district and which other documents would be valuable or useful.

## Write the Project History

The project history provides a documented, written record of the history of the project from its creation to its termination. Properly prepared, it

can be quite helpful in planning the implementation of other new instructional programs by providing information derived from experience regarding dimensions of uncertainty. For example, the experience gained in estimating material needs for IPI Reading could be helpful to those charged with ordering materials for the implementation of IPI Math. Also, experience gained in working with teachers on individualizing student learning prescriptions could be helpful to principals and coordinators who are managing another IPI implementation.

Plan for Next Year

Plans for operating the new instructional program in its first year as a regular program have to be made. Much of this planning is done toward the end of the implementation project. For example, suppose a school is implementing IPI Reading this September and plans the final transition into a regular, on-going program for the following September. Then many planning activities for the on-going program will begin in the spring. For example, materials will probably be ordered in May and additions or modifications in the program procedures and/or content based upon evaluation results should be detailed in May or June, so that they can be included in the teacher training program scheduled for July or August. Any changes that call for modification of classrooms certainly must be made by May or June, since the work will almost certainly be done in July or August. Some final modifications may, of course, not be made until July due to the heavy schedule for school staff that is usually associated with the end of the school year.

Planning for the next year of operation should involve project staff at all levels. Teachers will have valuable information inputs, while principals

and curriculum supervisors are in a position to look at the larger picture and make recommendations for change in the overall operation of the new program. The advice, approval and support of the superintendent and/or other cer .ral office administrators is beneficial, if not necessary, for the effective implementation of desired changes for the next year.

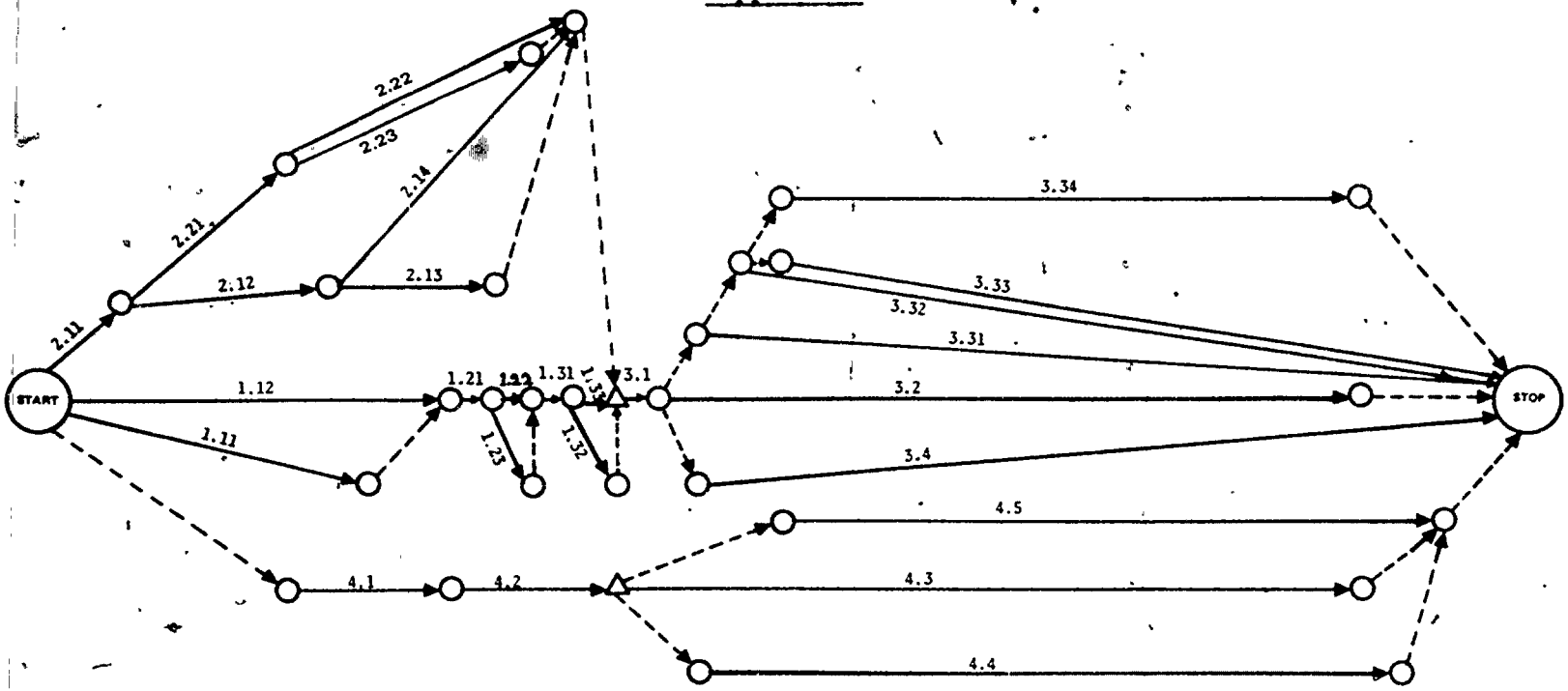
## IV. Conclusion

An effort to introduce a new instructional program or a major instructional program modification into one or several school buildings fits the definition of a project. Consequently, such efforts, sometimes termed "implementation projects," can benefit from being directed or managed from the project management viewpoint. This involves the employment of specific project management skills and techniques as the project moves through the four phases of the project management process -- planning, preparation, operations, and termination.

The planning phase involves developing a project definition, work flow diagram, time and resource estimates and schedules, and a project budget. The preparation phase involves obtaining and training staff, orienting personnel, obtaining and distributing materials and equipment, arranging for the use of facilities, developing an evaluation plan, obtaining or developing measurement instruments, and developing a project information system. The operations phase involves orienting and instructing pupils, disseminating information, modifying program content and/or procedures, administering measurement instruments, scoring and analyzing evaluation data, and synthesizing data reporting results. The termination phase involves informing project personnel of changes, preparing a final report, retaining important records and documents, writing a project history, and planning for next year.

If you desire to learn more about the management of an implementation project, you might want to contact the Administering for Change Program of Research for Better Schools, Inc., Philadelphia, Pa. 19103 or the Educational Program Management Center in the College of Education of The Ohio State University. Also, you may want to contact the Business Administration or

Educational Administration department of a nearby college or university. Many state departments of education also provide information and assistance concerning the implementation of a new instructional program.




## Project Time Line

| Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

WORK FLOW TASK NUMBERS AND DESCRIPTIONS

| Task Number | Task Description |
|---|---|
| 1.11 | Obtain Teaching Staff |
| 1.12 | Obtain Support Staff |
| 1.21 | Train Administrative Staff |
| 1.22 | Train Teaching Staff |
| 1.23 | Train Support Staff |
| 1.31 | Orient Non-Involved Administrators and Teachers |
| 1.32 | Orient Parents |
| 1.33 | Orient Community Members |
| 2.11 | Order Materials and Equipment |
| 2.12 | Check and Inventory Materials and Equipment Received |
| 2.13 | Distribute and Arrange Materials |
| 2.14 | Install Equipment |
| 2.21 | Specify Facilities Required |
| 2.22 | Reserve and Schedule Existing Facilities |
| 2.23 | Modify some Existing Facilities |
| 2.24 | Construct New Facilities |
| 3.1 | Orient Pupils |
| 3.2 | Instruct Pupils |
| 3.31 | Report to Superintendent and School Board |
| 3.32 | Report to Non-Involved Administrators and Teachers |
| 3.33 | Report to Parents and Community |
| 3.34 | Conduct Visitations |
| 3.4 | Modify Program Content and/or Procedures |
| 4.1 | Develop Evaluation Plan |
| 4.2 | Obtain or Develop Measurement Instruments |
| 4.4 | Score and Analyze Data |
| 4.5 | Synthesize and Report Results |

Detailed Work Flow Diagram with Project Time Line for an Instructional Program Implementation Project