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ABSTRACT

Questionnaires were administered to the staffs of two elementary schools as part of a program to identify salient forces within schools that facilitate or inhibit the implementation of educational innovations. One school, an "experimental" school, was engaged in a district differentiated staffing project; the other, a "control" school, was a conventional school of similar size and student clientele. Findings indicate that two general inferences may be drawn about the innovative process. First, some structural changes are almost inescapable in an innovating school and its work system, and the consequences of such changes are not always congruent with the innovation intended. Secondly, major implementation projects normally have "disruptive effects" that divert teacher attention away from those duties they regard as their foremost responsibility. These circumstances constitute the hidden costs of change and should be recognized in advance in order that false expectations of success are not entertained and provisions can be made during the implementation phase for minimizing or absorbing these expectations. When excessive, the costs of change carry the imminent threat of staff disaffection with the innovation. (Author/WM)

Measuring the Implementation Of Differentiated Staffing

A Comparison of Two Elementary Schools

W. W. CHARTERS, JR.

Center for the Advanced Study of Educational Administration
University of Oregon, Eugene, Oregon

1973

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Introduction

In the fall of 1970, staff members associated with Program 20 of the Center for the Advanced Study of Educational Administration launched a series of case studies of schools attempting to implement a particular type of educational innovation—differentiated staffing (DS). The general intent of these studies was to identify salient forces within the school that facilitate or inhibit the implementation process.

As these case studies were going on, members of the research staff began to develop systematic measures of a number of variables that would be essential to tap in the more extensive studies to which the exploratory investigations were expected to lead.* Prime emphasis was given to measures suitable for use in elementary schools, inasmuch as Program 20 plans called for a concentration of research at that level in the immediate future. With certain modifications, however, the questionnaire instruments that resulted from this

* Roland J. Pellegrin collaborated closely with the author in developing the measures, and we were assisted by William R. Horstman and Keith F. Smith. Horstman and the author assumed responsibility for conducting the analysis of data.

work were usable at the secondary level as well. In the spring of 1971, a provisional form of the instrument was field tested in an elementary school, revised by the research staff, and then administered again to teachers in three of the schools involved in the differentiated staffing case studies—one elementary school, one intermediate school, and one high school—all in what we have called the Overland School District. (At about the same time, and in connection with an entirely different study, the instrument was administered to an additional nine elementary and secondary schools in Oregon.)

This report focuses on the results of questionnaire administration in the elementary school of the DS study. A fortuitous circumstance permitted the research staff to collect teacher responses to the instrument in a second elementary school of the Overland District that was not implicated in the district's differentiated staffing project—a conventional school of similar size and student clientele. The report, then, compares teacher responses to the instrument in the "experimental" and "control" schools obtained in May, 1971—near the end of the first year of implementation efforts in the "experimental" school.

We have two purposes for reporting the comparisons at this time. First, the comparative framework is a convenient vehicle for making available to the research and development community, the fruits of our work in developing measures of a school's instructional organization and related matters. The measures are sociologically slanted and are uncommon insofar as the normal run of educational research is concerned, although they are by no means new measures. The report provides the occasion for describing them in detail, for indicating the rationale that lay behind them, and for illustrating the modes of analysis to which they lend themselves. In this way, we hope that other investigators will have sufficient information on which to base work leading to their further improvement.*

Second, we believe the comparisons have substantive interest in

* While the body of the report describes question wording, alternatives, and response format for most of the measure, the full questionnaire (elementary form) is reproduced in Appendix D.

themselves. Here was one elementary school that, for a full school year, had been the target of well-financed efforts to implement a major innovation; here was a neighboring school that had followed its natural course during the year, without the intervention of a formal program for change. In what respects, if any, did they differ at the end of the year?

The questionnaire data assembled by the CASEA researchers were designed to supplement information obtained by participant observers in the case-study schools and, in this respect, they were not expected to stand entirely by themselves. The tabular summaries and statistical comparisons emphasize descriptions of the situation prevailing at the end of the school year. How the situation came to be that way, why the situation did or did not differ in the "experimental" school, and what the problems and processes of innovation were during the implementation phase—these are issues addressed by the case studies and not by the present report.* Only in limited ways do the questionnaire data move beyond description and toward diagnosis.

* For a review of the major findings of the series of case studies, see W. W. Charters, Jr., and Roland J. Pellegrin, "Barriers to the Innovation Process: Four Case Studies of Differentiated Staffing," *Educational Administration Quarterly*, 1972, *9*, 3-14. A more detailed account, including a description of the "experimental" school on which this report focuses, is presented in W. W. Charters, Jr. *et al.*, *Process of Planned Change in the School's Instructional Organization*, Eugene, Oregon: Center for the Advanced Study of Educational Administration, 1973.

CHAPTER I

Two Elementary Schools And Their Measurement

Efstutt Elementary School was one of three schools in the Overland School District choosing to participate in the district's federally-funded differentiated staffing project. The Overland district serves a rapidly growing satellite city in the Northwest and is noted for being among the leaders in educational innovation. The other two schools in the DS project of the district were an intermediate school and a senior high school. After a year or more of preparation and planning, the staffs of all three schools began, in the fall of 1970, implementing a differentiated staffing program.

With the full cooperation of Overland school officials, the research staff of Program 20 of the University of Oregon's Center for the Advanced Study of Educational Administration (CASEA) stationed a participant observer in each of the schools to make a year-long study of the implementation process.* Eight months

* A full report of the Efstutt observer is in preparation: John E. Jones, An Elementary School Under Conditions of Planned Change, Doctoral dissertation, Syracuse University, 1973. For a brief description see Jones' paper by the same title in W. W. Charters, Jr., *et al.*, *Process of Planned Change in the School's Instructional Organization*, 1973.

later, in May of 1971, a questionnaire instrument that had been under development by the research staff during this period was administered to the teaching faculties of the three schools and, in addition, to the faculty of another elementary school in the Overland district not involved in the DS project.

The attention of the present report is on a comparison of the questionnaire results for the two elementary schools. This chapter briefly examines Efstutt's DS plan, describes Efstutt's similarities to the "control" school (which we will call Gordon Elementary School), and discusses the measures that were employed. At the chapter's end we will indicate the order in which the results will be treated in the remainder of the report.

Differentiated Staffing in Efstutt

As the term is generally understood, differentiated staffing refers to a novel mode of organizing the school's basic work operations. The instructional unit no longer is viewed as a single teacher and thirty or forty students bound together in a classroom, but rather as an "instructional team" consisting of a number of adults who jointly plan and conduct instruction for a much larger group of students. The teaching role itself is broken into smaller, more manageable jobs to which staff members can be assigned in terms of their particular interests, competencies, and training. DS implies the use of a wide array of talent to augment the instructional program, irrespective of credentialing status, including aides, interns, technicians, curriculum specialists, outside resource people, and the like. It calls for a differentiation of salaries and wages according to the level of responsibility and skill required of the positions.

In particular, the staffing plan developed by the Efstutt faculty called for employing a large contingent of sub-professional "teacher assistants" in the school (as replacements for the half-a-dozen or so certified grade-level teachers who were resigning or transfering to other schools in the district), incorporating a number of student teachers and interns in the instructional staff, forming the professional staff into what were to be called instructional teams and curriculum teams, appointing leaders of the teams who were to be paid

a sum in addition to their regular salaries, and establishing a high-level professional position (instructional coordinator) to work with the teams and to serve in a quasi-administrative capacity under the principal.

During the preceding spring the Efstutt faculty had prepared job descriptions for most of the newly-established (as well as old) positions and had worked out organization charts showing lines of authority and responsibility for school operations. While the documents were not fully explicit on the point, instructional teams were regarded as replacing the classroom as the basic operating unit for instruction. Curriculum teams were regarded more on the order of "staff" units supporting the instructional teams, primarily in curriculum development and the assemblage and preparation of instructional materials.

Teachers were assigned to the instructional teams by pairs of grade levels. Thus, the four teachers of the first and second grades constituted one instructional team, the four third- and fourth-grade teachers another, and the five fifth- and sixth-grade teachers a third. Each had a team leader who was paid a $350 salary differential above his base rate. (Instructional teams had existed on a less formal basis in Efstutt in previous years and without paid leaders.)

In addition, the Efstutt staff was grouped into four cross-cutting curriculum teams (in science, language arts, social studies, and math) with the membership so constituted that each instructional team had at least one representative on each of the curriculum teams. Curriculum team "coordinators," or leaders, were paid a $1,000 increment above their scheduled salary. In all, six of the 16 Efstutt teachers were leaders of either instructional or curriculum teams; one teacher was a leader of both.

These, then, constituted the main features of Efstutt's staffing plan. A few other less central changes were to be instituted as well. Shortly, we will be more specific about the plan when we give comparative information for the Efstutt and Gordon staffs.

It should be noted that most of the features we have just described represent *structural changes* in the school's organization—*i.e.*, features that can be altered administratively or by proclamation. They

could be (and were) instituted on the beginning day of school. Thus, when Efstutt opened its doors in the fall, the new positions had been filled, teachers had been assigned to teams, leaders appointed, salary contracts adjusted, and the organization charts and job descriptions were declared as being "in effect." The skeleton of a differentiated staffing program had been established.

As the Program 20 researchers conceived it, the crucial phase of implementation still lay ahead: the *behavioral changes* in the Efstutt staff. How would the skeleton be fleshed out, so to speak, in the ensuing months? It was the behavioral aspects of instructional organization that the researchers regarded as especially problematic and which they sought to measure through their instruments. During the course of the year would instructional teams come to function as teams, would team leaders lead, teacher assistants assist, and so on? More generally, would the staff members in fact alter their styles of work performance, their role behavior, and their modes of relationship so as to accord with the vision of a differentially staffed instructional program, or would the program exist only in skeletal form?

Comparison with Gordon School

A second elementary school in the Overland district, Gordon school, served as a comparison for the questionnaire data obtained in Efstutt.* Gordon operated a traditional, self-contained-classroom program and was not a participant in the district's DS project, nor did it have any special programs for developing the range of educational goals which Efstutt's DS participation was intended to

* Choice of the Gordon school was the result of a fortuitous circumstance. Program 20 researchers had learned that a doctoral study was under way in Efstutt, conducted independently of the CASEA investigation, that would compare achievement gains on fifth- and sixth-grade students under a differentiated staffing and a traditional program. Since the investigator had selected Gordon as the traditional school on the grounds of its comparability with Efstutt, the Program 20 researchers arranged to administer the teacher questionnaires there as well. For further details regarding the similarity between the Efstutt and Gordon schools, see Richard D. Pedee, The Relative Effects of Differentiated Staffing on Elementary School Student Achievement in [Overland] Public Schools, Doctoral dissertation, University of Oregon, 1971. [Name of district in title has been changed to preserve anonymity.—Author.]

accomplish. Otherwise, the two schools were highly similar. Both were six-year graded schools (without kindergartens) serving primarily middle-income neighborhoods. Both followed the standard curriculum of the district, and their formal administrative connections with the school system's central office were identical. Efstutt's enrollment of 480 students was nearly the same as Gordon's at 500.

Efstutt was the newer of the two schools. A greatly enlarged, modern building had been constructed about three years earlier on the site of an old building and was designed on an open-space plan to accommodate team teaching. The Gordon building was considerably older and built in the conventional, walled-classroom design. The schools, however, were comparable with respect to instructional media, library provisions, and other facilities.

By virtue of the recent expansion of Efstutt's physical plant, nearly all of the teachers had taught in the school less than four years. At the same time, Efstutt had only one first-year teacher; well over half of the staff had arrived at the time of the expansion and were currently in their third year at the school. The situation at Gordon was different in this respect. Gordon had a rather large number of newcomers to the staff (seven of the 21 teachers were in their first year) and another large group who had been with the school for some time (seven had been in the school five years and more; three "old-timers" had been at Gordon at least 15 years). The staffs also differed in total amount of teaching experience: Efstutt teachers as a group were less experienced (median = four years) than those at Gordon (median = seven years). They were essentially alike, however, with regard to the level of formal training.

The structural changes introduced in Efstutt in the fall of 1970 did not alter certain of the fundamental similarities between the two schools in the pattern of staff assignments. In a few respects, the changes made the schools more alike. As regards the gross division of instructional labor, the bulk of the teachers in both schools were assigned a class of students at a given grade level (grades one through six) and were formally responsible for instructing the class in all areas of the curriculum except music and physical education.

Classes within grade levels were formed heterogeneously. Both schools had full-time teachers of music and of physical education who taught their respective subjects to grade-level classes on a regular schedule.

In Efstutt, however, the DS program had provided for the addition of a half-time music teacher to work with the full-time teacher. The plan to add another subject-matter teacher to Efstutt's staff—in art—was not fully consummated during the year. A well-qualified but non-certificated art instructor (given the title of art coordinator) had, indeed, been brought on the staff and had assumed responsibility for at least some of the classroom instruction in the area, but he left in the middle of the year and was not replaced.

In addition to the grade-level and subject teachers, both schools incorporated student teachers in their staffs from nearby training institutions—Efstutt had five, Gordon seven, in the spring quarter of 1971—but the Efstutt staff also included one half-time intern teacher. Both Efstutt and Gordon had an instructional materials center (IMC) coordinator and a full-time reading specialist as part of their professional staffs. The latter position was added to Efstutt under the DS program, but it had the effect of making the two schools equivalent in this respect. As an outgrowth of an earlier federal program, Efstutt also had the services of a full-time counselor.*

Both schools, of course, had a building principal. Efstutt's DS plan, however, created a new position of instructional coordinator,

* Throughout the report we will use *instructional staff* to refer to certified personnel who are assigned to teach classes of students on a regularly scheduled basis (including, in Efstutt and Gordon, grade-level teachers and the subject-area teachers of music and physical education), thus distinguishing them from *support specialists*, also certificated, who do not have a regularly scheduled responsibility for a class of students. The latter group, consisting of such personnel as librarians, curriculum specialists, counselors, and reading specialists, stand in varying relationships to the instructional program—some providing specialized services to students, some providing specialized assistance to the instructional staff—but all share the characteristic of depending on others to *use* the services they offer and thereby justify their position. Although our distinction is not a common one, we find it useful in view of the implications it carries regarding the difficulties personnel in new positions encounter in working out a role for themselves in the school organization.

which was depicted in the organization chart as directly subordinate to the principal (but not clearly superordinate to the instructional staff). According to the job description, the instructional coordinator was responsible for staff development programs, coordination of instructional and curriculum teams, time schedules in the building, the training and supervision of non-certificated personnel, school-community liaison, administrative duties in the principal's absence, and other items. Thus the position was quasi-administrative in character, not totally dissimilar to the familiar position of the vice-principalship in the elementary school.

Efstutt's engagement of a cadre of paraprofessionals under its DS program, like the creation of the instructional coordinator position, marked a major structural difference between Efstutt and Gordon. While both schools had a secretarial aide, as well as a secretary, in the school office, Efstutt provided each instructional team with part-time clerical services (two hours daily) and four "teacher assistants" (four to five hours daily), nearly one per grade-level teacher. There were no corresponding positions affording direct assistance to teachers in the Gordon school.

By virtue of the trade-off adopted by the Efstutt faculty between paraprofessionals and certified teachers, the size of the instructional staff was substantially smaller in Efstutt than in Gordon. Specifically, Efstutt had 13 grade-level teachers and 2.5 subject-area teachers (considering the half-time music instructor) and Gordon had 19 grade-level and two subject-area teachers. As a result, grade-level classes averaged 37 students at Efstutt and just over 26 students at Gordon. The smaller size of the instructional staff meant, too, that a higher proportion of Efstutt teachers was involved in the supervision of student teachers.

The job descriptions prepared by the Efstutt faculty had drawn a distinction between two categories of certificated teachers: "instructors" and "associate instructors." The latter were to be first-year teachers, and each instructional team was to have no more than one. No salary differential was specified between the categories other than that already provided by the standard salary schedule for the district. While three of the newer grade-teachers were desig-

nated "associate instructors" (only one of whom was a first-year teacher), in point of fact, according to the case-study investigator, the distinction was not recognized in practice during the first year either by teachers or by the principal.

The personnel listings in Table 1 summarize staff assignments in the two schools. The numbers represent people, not full-time equivalencies. Since a few of the paraprofessionals served in dual capacities, the numbers do not precisely reflect the services provided. Also,

TABLE 1

NUMBER OF EMPLOYED PERSONNEL IN EFSTUTT AND GORDON SCHOOLS, BY POSITION*

Position	*Efstutt School*	*Gordon School*
Principal	1	1
Office secretary, aide	2	2
Instructional coordinator	1	–
Grade-level teacher		
Team leader (instructional or curriculum)	6	–
Other grade-level teacher	7	19
Subject teacher		
Music	2	1
Physical education	1	1
Art coordinator†	1	–
Trainee		
Intern	1	–
Student teacher	5	7
Paraprofessional		
Teacher assistant	11	–
Clerical aide	2	–
Support Specialist		
Reading	1	1
Instructional materials center coordinator	1	1
Counselor	1	–
Total	43	33

* Numbers refer to individuals. Some positions were less than full-time.
† Non-certificated. Left staff in middle of year.

while the art coordinator is listed in the table, he was not in Efstutt at the end of the school year. The totals show that Efstutt's staff was about 30 percent larger than Gordon's. Also, while the Gordon school had eight distinct categories of staff position, Efstutt was the more differentiated of the schools, with 15 staff categories.*

Measurement

A questionnaire instrument was administered to members of the instructional staffs in the two schools during specially scheduled faculty meetings late in May 1971. Only certificated staff members who had regularly assigned instructional contact with students were asked to complete the questionnaire. (Although a few additional staff members inadvertently were included in the testing sessions, their responses have not been tallied for the present report.) All eligible members in both schools, except the half-time music teacher in Efstutt, furnished responses, yielding a total of 15 returns in Efstutt, 21 in Gordon. They were broken down as follows:

	Efstutt	*Gordon*
Grade-level teachers	13	19
Subject-area teachers (music, phys. ed.)	2	2
Total	15	21

Completion of the questionnaire required from 35 minutes to one hour and 15 minutes, with a modal time of approximately 45 minutes. Teacher responses were not anonymous, since little in the instrument could be regarded as of a sensitive nature. Nevertheless, teachers were assured that their returns would be treated confidentially by the research staff. An effort has been made in this report to present data in such a manner that the responses of individuals cannot readily be identified.

In developing measures for inclusion in the questionnaire, the main emphasis of the research staff was in descriptions of the *work*

* Excluding the inoperative distinction between associate instructors and instructors.

system of the school—*i.e.*, the manner in which teachers or other instructional agents apply their energies individually and collectively to accomplish the school's primary mission of instructing students.* More simply, we were concerned with measuring who does what, how, and with whom to get the teaching job done. It is in these regards, of course, that an operating DS program is supposed to alter a school. With the emphasis on the work system, the measurement procedures departed from the more usual concerns in studies of innovative programs, in which attention focuses heavily on the program's effects on students and their learning. The present investigators collected no information from or about students, except indirectly as they were the targets of teachers' work activities. Our contention is that one must be able to establish the existence of an innovative program before its effects on students reasonably can be assessed. Since the methodology for measuring the school's work system has not been systematically cultivated in the past, the emphasis of the research did not seem to be amiss.

Moreover, our interest was in measuring the *behavioral*, as distinct from the *structural*, aspects of the work system. It is usually easy to detect structural changes in a school—newly created positions, revised job titles, rewritten job descriptions, new or reorganized departments, committees, and so on—but it is less easy to document the alterations in role behavior and modes of interpersonal relations which are supposed to accompany them. Yet it is the latter that are the essence of planned change. If committees are formed but never meet, if position titles are changed but incumbents perform as usual, the change turns out to be hollow. This is not to say that the structural changes are unimportant or that they are without effect. Often they are necessary antecedents to behavioral change within an organization, providing both the direction and legitima-

* We use *work system* to mean the same thing sociologists of organization mean by "technical system" (Parsons), "production sub-system" (Katz and Kahn), or "socio-technical system" (Miller and Rice). See Talcott Parsons, *Structure and Process in Modern Societies*, New York: Free Press, 1960; Daniel Katz and Robert L. Kahn, *The Social Psychology of Organizations*, New York: Wiley, 1966; E. J. Miller and A. R. Rice, *Systems of Organization: The Control of Task and Sentiment Boundaries*, New York: Tavistock Publications, 1967.

tion for new behavior. In some instances, structural changes so alter the immediate circumstances of task performance that behavioral changes are nearly inescapable, whether of the sort anticipated in the planning or of a different sort.

Thus, the methodological interests in measure development centered on describing what people in the school do and how they relate to one another as they carry out the instructional functions. We wanted to measure the behavioral changes which constitute the school's work system, as they follow from the introduction of structural changes and as they may (or may not) correspond to the intentions of the planners.

Not all of the measures developed for the questionnaire, however, were concerned purely with work-system description. One measure, which sought to identify the meanings of staff members attached to the term *differentiated staffing*, was included specifically for this research project. The research associates who were stationed in the schools felt that systematic information on teacher interpretations of the concept would help them clarify issues emerging in their case studies.*

Several other sets of questions measured teacher attitudes toward their teaching job. These were included mainly for "try-out" purposes in the belief that they would prove useful in later studies (where data could be taken before implementation began) for explaining differences in particular patterns of behavioral change. Still other parts of the questionnaire dealt with features of the social and political order of the schools—features that were known from previous studies to change concomitantly with changes in instructional organization. While the latter features do not *define* the school's work system, they are closely allied with it.

Organization of the Report

We can be more explicit about the measures that were used in the study as we describe the order in which the results are discussed in

* This measure and the problems associated with it are described in Appendix C.

the report. Chapter II discusses attitudinal characteristics of the staffs, in particular their *teaching goals* and *orientations to the teacher's role* in the public school. Chapter III begins consideration of the behavioral aspects of the work system, focusing on the *teaching tasks* performed by individual teachers: the performance of non-instructional chores, individualization of instruction, teacher specialization, and the instructional management role. Chapter IV continues consideration of the work system, but now focuses on the relationships of staff members with one another—the *division of labor*, *task interdependence*, and *staff communication*.

In Chapter V we describe the results of our measures of the decision-making machinery of the school, first in connection with *instructional decisions*. The constraints on teachers as they make instructional choices, discussed in the first part of the chapter, can be considered a significant feature of the work system *per se*, but the succeeding parts of the chapter deal with issues wider than instruction—formal and informal mechanisms of *staff evaluation*, the distribution of *staff influence* in school-wide decisions, and the attribution of *esteem* to fellow staff members.

The final chapter, Chapter VI, constitutes a summary of the report. In the course of it, we will comment on the measure of the meanings attached by staff members to the concept of differentiated staffing. Three appendices to the report give further methodological details on several of the measures. A fourth appendix contains the complete questionnaire.

Statistical Comparisons

In the chapters to follow, the questionnaire data for each school are summarized in ways that are consistent with the descriptive intent of the report and that are appropriate to the nature of the measures employed. The data are not sufficiently abundant to support elaborate statistical treatment. Typically, teacher responses are presented in frequency or percentage distributions, although where scores can be derived from the measures, means are shown for each school. Sometimes responses are aggregated over all members of the instructional staffs (N=15 and 21 in Efstutt and Gordon, re-

spectively), sometimes over grade-level teachers only (N=13 and 19), depending on the measure's relevance. In one or two places, individual responses of teachers are displayed on certain items to illustrate or reveal particular patterns of relationship.

Formal tests of statistical significance are not employed in this report. It would be inappropriate, if not misleading, to do so. Since the comparisons are based on so few cases, only very large differences in teacher responses could reach significance at the .10 level, or still larger ones at the more stringent .05 level. Exclusive reliance on formal tests would "stack the deck" against finding differences between the two schools at year's end. In statistical language, the risks of a Type II error would be substantial.

At the same time, a great number of tests would have to be run, posing the opposite danger that significant differences would be generated on the basis of chance alone. Indeed, ten percent of the tests could be expected to reach the .10 criterion of significance even though no true difference existed between the schools. For some of the measures and analyses in the report, standard significance tests cannot be applied without seriously violating their assumptions. Far more complex procedures would have to be developed—a task whose execution would lend a level of precision unwarranted by the present data or by the purposes of the monograph.

The approach we have used is an informal one, relying on patterns and consistencies that can be observed in the data rather than on discrete tests. At various points we invoke "rule of thumb" judgments regarding how much of a difference in a particular measure of the two schools can be regarded as noteworthy—judgments that are based on our knowledge of the character of the measurement procedure and its potential errors, the performance of the measure in other analyses not reported here, and, of course, the observed or estimated variance in score distributions. The informal approach is congruent with the illustrative purposes of our report and the *post-factum* nature of the school comparisons.

CHAPTER II

Teaching Goals And Teacher Role Orientation

The first comparison between the Efstutt and Gordon schools we will report is with regard to two personalistic attributes of members of the respective instructional staffs—the teaching objectives they profess to hold for themselves and their general orientations to the role of the teacher in the organizational setting of the public school.

These variables, unlike those to be described in succeeding chapters of the report, were *not* expected to change as a consequence of participation in a DS program. They represent relatively enduring attributes of teachers which, we assume, change only gradually through the years and, in any event, were not direct targets of the change effort in Efstutt's DS program. They were included among our measures for a different purpose. We entertained the view that DS implementation is more likely to prosper among teachers who hold particular conceptions of the teacher's role or who agree on instructional objectives than among teachers with different role conceptions or who disagree on objectives. Hence, the measures were

devised to tap *antecendents* of DS implementation rather than *consequences*. They are put to use analytically in this chapter as a means of understanding the progress of implementation (or, better, the lack of it) in the DS school.*

Instructional Objectives of Efstutt and Gordon Teachers

It is generally acknowledged that an important basis of difference among teachers is their views on the objectives to be sought through instruction. It is a difference that can give rise to severe interpersonal strains as teachers work side by side and especially as they seek to cooperate with one another on instructional matters.

To assess the kinds of objectives teachers held for themselves, an item was drawn from an earlier CASEA instrument, modified slightly, and included in the teacher questionnaire:

> As a teacher you have certain primary instructional objectives or goals you wish to attain. At the same time, you must establish priorities among these objectives.
>
> Listed below are several instructional objectives. Please read through the entire list, and then check those *three* objectives to which you give the highest relative importance, priority, or emphasis in your work.

Following the question were 13 objectives listed in Table 2 (although they did not appear in that order in the questionnaire).

Comparison of the two staffs. With the exception of one objective, no important differences appeared between the Efstutt and Gordon teaching staffs in the aggregate frequency with which the 13 objectives were endorsed. As Table 2 shows, the majority of teachers in both schools regarded "improving the self-image, or self-worth, of individual students" as a high priority objective. The other two most frequently endorsed objectives concerned the teaching of "basic skills and subject matter content" and giving students "individual

* Even though the attributes were measured in the spring of 1971, we treat them as though they characterized the staffs at the outset of the school year. The assumption involved is a reasonable one and certainly consistent with the facts we have uncovered, but we will have occasion to introduce a cautionary note about it later.

TABLE 2

PERCENTAGE OF STAFF MEMBERS ASSIGNING HIGH PRIORITY TO THIRTEEN INSTRUCTIONAL OBJECTIVES EFSTUTT AND GORDON SCHOOLS

	Percent		
	Efstutt (N=15)	*Gordon (N=21)*	*Difference*
Improving the self-image, or self-worth, of individual students	60	56	4
Giving individual attention to students	53	43	10
Ensuring that students learn basic skills and subject matter content	40	48	8
Helping students develop a good system of values	40	24	16
Enriching the course of study or curriculum for your students	27	24	3
Diagnosing learning problems of students	27	28	1
Encouraging creativity among students	13	10	3
Maintaining an orderly environment for learning	13	10	3
Experimenting with new teaching techniques	7	–	7
Coordinating classroom activities with other parts of the school program	7	14	7
Helping individual students solve their personal problems	7	–	7
Developing student ability in analytical reasoning and problem-solving	7	38	31
Developing the aesthetic potential of students	–	5	5

attention." (A difference of less than 20 percent in this table could reasonably be due to measure unreliability.)

Gordon teachers, however, checked "developing student ability in analytical reasoning and problem solving" considerably more often than Efstutt teachers. We cannot account for the relative popularity of this objective among the Gordon teachers (or its relative

unpopularity in Efstutt*), but we can note that virtually all of the Gordon teachers who endorsed it taught in the fourth, fifth, and sixth grades.

Apart from the "analytical reasoning objective" and, possibly, a slightly heavier emphasis of the Efstutt staff on developing a "system of values," the teaching goals of the two staffs were highly similar. And the rank order of popularity of the goals is typical of other elementary schools in which the question has been asked. It would be difficult to argue, on the basis of these data, that the differentiated staffing project was established in a school whose staff members were fundamentally unique in their outlooks on the goals of teaching.

We should comment, in passing, that teachers were also asked to report the major barriers, or constraints, they faced in their schools as they tried to achieve their teaching objectives. The most important impediments in both schools, and, indeed, in all schools for which we have data, were "lack of time" and "conflict with other duties and objectives." Few or no teachers felt they were constrained in pursuing their teaching goals by other parties in the environment —the principal, other teachers, parents, the central office—or by school district policies. "Lack of physical facilities and space," a prominent impediment reported in many elementary schools, including the Gordon school,was not an issue in Efstutt, however. With this minor exception, Efstutt and Gordon teachers were alike in attributing their handicaps to the impersonal and ineluctable circumstance of teaching: too much to do and not enough time in which to do it.

Teacher agreement on goals. While the evidence presented above indicates that the Efstutt and Gordon staffs were generally similar in their views of instructional objectives, it does not bear on the more intimate question of the degree of similarity within each school.

* That the endorsements were unusually *low* in Efstutt is suggested by the relatively high popularity of the "analytical reasoning" objective in other elementary schools. For example, it was second in importance in the three control schools studied by Pellegrin in Wisconsin. See Roland J. Pellegrin, "Some Organizational Characteristics of Multi-unit Schools," Center for the Advanced Study of Educational Administration, Technical Report No. 7, 1970.

Instructional teams had been decreed in the Efstutt school in the expectation that such teams would promote collaborative activity among their members. It seems reasonable to argue, however, that the formation of teams would facilitate close collaboration only on the condition that the members had reasonably homogeneous views regarding the goals of instruction. If the teachers who were thrown together by the organization of teams did not share a common view of instructional objectives, we might well expect that the emergence of collaborative behavior would be inhibited.

How common were the instructional views of Efstutt's team members? Was there greater agreement within each of Efstutt's three teams than across the Efstutt staff as a whole?

A rough index of agreement was constructed by examining the particular objectives checked by each pair of teachers in the school. When the three choices of a pair were found to be identical, or when two of the choices were the same, that pair was said to be "*in* agreement." If a pair had no objectives or only one objective in common, the teachers were considered not to share a common outlook on instructional goals. The percentage of teacher-pairs "in agreement" was the numerical base of the index.*

Overall, 28 pairs of Efstutt teachers were in agreement by this criterion—which amounts to 36 percent of the 78 possible pairings among the Efstutt staff members. (Only four pairs agreed on all three of their objectives, a more stringent criterion of "agreement.") The percentage of agreement among Gordon teachers as a whole was only slightly less—33 percent.

* This index of agreement is unsatisfactory in several respects. For one thing, we cannot say that the absence of agreement between two teachers indicates active disagreement. Teachers respond to the items in terms of the relative importance they give them, not in terms of their agreement or disagreement with them.

The index also shows the agreement between the *pairs* of teachers on a team, not among *all* teachers who constitute a team. It would be possible, for example, for the three pairs of teachers on a three-teacher team (Pair A-B, B-C, A-C) all to be "in agreement" on two of their three choices of objectives and hence show a 100% agreement rate; but all three teachers may not happen to have endorsed the *same* two objectives. Thus, our language is not entirely precise when we refer to agreement within a team.

Before we show the results concerning within-team agreement, we must report an accidental finding that appeared during our inspections of the data. We were surprised to discover in Efstutt that agreement was much greater among teachers of the intermediate grades (fourth, fifth, and sixth) than among the primary teachers. Well over half of the intermediate teacher-pairs were "in agreement" on instructional objectives. We immediately examined the situation in the Gordon school and found, again, that intermediate teachers were in greater agreement than primary teachers. The difference was not quite so strong, but it was still pronounced. These agreement percentages are shown in the first two rows of Table 3.

Why there was so little agreement, comparatively speaking, at the primary level is not clear,* but if the reasoning underlying our analysis is correct, the data suggest that instructional collaboration would be harder to achieve in either school among primary teachers than among intermediate teachers.

TABLE 3

AGREEMENT ON INSTRUCTIONAL OBJECTIVES AMONG PRIMARY AND INTERMEDIATE GRADE TEACHERS EFSTUTT AND GORDON SCHOOLS

	Efstutt		*Gordon*	
Teacher-Pair	*Number of Pairs*	*Percent in Agreement*	*Number of Pairs*	*Percent in Agreement*
Within primary grades	(15)	27	(36)	31
Within intermediate grades	(21)	61	(45)	51
Between primary and intermediate grades	(42)	26	(90)	13
Entire school	(78)	36	(171)	33

* The difference in agreement rates could be an artifact of the objectives listed in the questionnaire. Although casual inspection does not support it, there could have been more objectives relevant to primary teaching than to intermediate teaching included in the list, permitting the primary teachers to disperse their choices more widely and thereby to show less agreement by our criterion.

The next table, Table 4, focuses directly on agreement among teachers in the specific grade-groupings that, in Efstutt, formally constituted instructional teams. These were grades one and two, three and four, and five and six. (For sake of comparison, Table 4 also shows parallel calculations for Gordon teachers, although, of course, they were not organized into teams.) The crucial figure in the table

TABLE 4

AGREEMENT ON INSTRUCTIONAL OBJECTIVES AMONG INSTRUCTIONAL TEAM MEMBERS IN EFSTUTT AND COMPARABLE GROUPINGS IN GORDON

	Efstutt		*Gordon*	
Teacher-Pair	*Number of Pairs*	*Percent in Agreement*	*Number of Pairs*	*Percent in Agreement*
Within team (or grouping)	(22)	46	(51)	37
Across teams (or groupings)	(56)	32	(120)	29
Entire school	(78)	36	(171)	32

shows that 46 percent of the 22 teacher-pairs on the same instructional team in Efstutt were "in agreement" on instructional objectives, compared with a rate of 32 percent for the 56 across-team pairs. Thus, the average within-team agreement in Efstutt is somewhat higher than that between teachers who did not happen to be assigned to the same team; but still, less than half of the team members were in agreement on as many as two out of three instructional objectives. Thus, the teachers on Efstutt's teams did not represent especially "homogeneous groups" insofar as instructional goals were concerned—certainly not as homogeneous as a figure of 65 to 75 percent would have indicated. The comparative data for Gordon tell us that, had their teachers been formed into teams according to the same procedure as in Efstutt, their homogeneity would have been even less—an average of only 37 percent agreement among the 51 teacher-pairs.

The within-team agreement level, however, is an average for all three teams in Efstutt and may obscure important differences from

one team to the next, so in Table 5 we show the detailed, team-by-team agreement percentages, again with comparative data for the Gordon teachers. The reader should note that the numbers of teacher-pairs on which the percentages are based are extremely small and, hence, unusually sensitive to measurement error. Nevertheless, the figures suggest that Efstutt's third-fourth grade team was quite homogeneous: two-thirds (67 percent) of the six pairs formed among the four teachers were "in agreement" on the objectives. There was somewhat less agreement in the fifth-sixth grade team (50 percent) and virtually none (17 percent) in the first-second grade team. The variability in agreement from "team" to "team" was not so great in Gordon, possibly because of the larger number of cases on which the percentages are based.

These results suggest that the prospects of realizing close collaboration on instructional matters among Efstutt teachers would be slight in one of the teams—the first-second grade team—but considerably brighter in the other two.

TABLE 5

AGREEMENT ON INSTRUCTIONAL OBJECTIVES WITHIN EACH EFSTUTT TEAM AND COMPARABLE GROUPINGS IN GORDON

	Efstutt		*Gordon*	
Team or Grouping	*Number of Pairs*	*Percent in Agreement*	*Number of Pairs*	*Percent in Agreement*
1st-2nd grades	(6)	17	(15)	40
3rd-4th grades	(6)	67	(21)	24
5th-6th grades	(10)	50	(15)	52

Interpretation of the findings must be tempered, however, by two considerations. First, we cannot be certain that the moderately high agreement in two of the teams was not the outgrowth, or consequence, of the unit organization rather than an antecedent to it. If we regard it as a consequence of team organization, it is still clear that team formation alone is insufficient to assure teacher agreement on objectives, as witness the 1-2 team.

Second, we have assumed that teacher agreement on instructional objectives and, in particular, the objectives as measured by our instrument, is a prerequisite to collaboration. There is no way of determining in the present study how essential such consensus is (in comparison, say, with consensus on views regarding pupil discipline and control) or, if it is essential, how high a level of agreement is required for collaboration to occur.

Summary. The information teachers provided about their preferred instructional goals indicated that the Efstutt staff was substantially similar to the staff in the comparison school, Gordon. Certainly, Efstutt teachers were not much more interested in individualizing instruction (a major emphasis of the differentiated staffing project) than Gordon teachers nor were they any less interested in the conventional objectives of instruction (teaching basic skills and subject matter) than the Gordon teachers. Both staffs saw the principal barriers to goal achievement as involving too much to do and not enough time in which to do it. Teacher agreement on instructional objectives, which can be regarded as a prerequisite to collaborative behavior, appeared to be quite high in one of Efstutt's instructional teams but outstandingly low in another. If the emergence of true teaming behavior does, in fact, depend on consensus concerning the goals to be taught, the teams as constituted in Efstutt had markedly uneven prospects and in none was full consensus indicated.

Orientation to the Teacher's Role

A second personalistic variable measured in the study concerned the orientations of teachers to the teacher's role in the public school. In particular, questionnaire items sought to measure staff members' inclinations to define the teacher's role as a "professional" or as an "employee." This is a relevant variable inasmuch as differentiated staffing, like many of the current staff utilization plans in education, has been promoted as a way of enhancing professional responsibility for instructional and curricular affairs of the school. DS seeks to lodge important educational decisions in the collegial group, to relieve trained teachers from routine chores that can be performed

by less skilled individuals, to provide career lines that do not necessarily lead out of the classroom, and so on. In short, DS caters to educational personnel who define themselves as professionals rather than as bureaucratic functionaries.

The scales. Abbreviated versions of two scales developed by Corwin to measure the strength of teacher orientations to the professional and employee definitions of the teacher's role were included in the questionnaire, consisting of four and six items, respectively.* Details about the scales and their development are presented fully in Appendix A.

An example of a professional orientation item is:

> The ultimate authority over the major educational decisions should be exercised by professional teachers.

And an item from the employee orientation scale:

> Teachers should adjust their teaching to the administration's views of good educational practice.

Teachers chose one of six responses to each item ranging from "strongly agree" to "strongly disagree," which, for scoring purposes, were weighted from six to one. A teacher's score on the professional orientation scale, then, was a simple sum of the weighted alternatives over the scale's four items; similarly, his score on the employee orientation scale was a sum over six items. Numerically larger scores, therefore, reflect stronger orientations to the particular role.

Although it would appear that the two kinds of role definition would be logical opposites, Corwin found an essentially zero correlation (+.07) between the two measures in his initial study and kept them separate for his analyses. We have followed his precedent, although with our abbreviated version, we found the expected nega-

* Ronald G. Corwin, *The Development of an Instrument for Examining Staff Conflicts in the Public Schools*, U.S. Department of Health, Education, and Welfare, Office of Education, Cooperative Research Project No. 1934, 1963. Also see Corwin's *Staff Conflicts in the Public Schools*, Cooperative Research Project No. 2637, 1966.

tive correlation (—.34) between the two scales when computed for elementary and secondary teachers together.*

Comparison of the two staffs. The prime finding, in comparing the role orientations of the two staffs, was that teachers in the Gordon school, who were uninvolved in the DS project, were higher in professional orientation and lower in employee orientation than those in Efstutt. The differences, however, are not pronounced. (See Table 6.) It is noticeable, too, that in respect to scores on the employee orientation scale, the Efstutt staff was characterized by rather marked heterogeneity. This is seen in the magnitude of the standard deviations in Table 6.

TABLE 6

MEAN PROFESSIONAL AND EMPLOYEE ROLE ORIENTATION SCORES EFSTUTT AND GORDON TEACHERS

	(Number)	*Mean Score*	*Standard Deviation*
Professional Orientation			
Efstutt teachers	(15)	17.0	2.04
Gordon teachers	(17†)	17.9	2.44
Employee Orientation			
Efstutt teachers	(15)	22.8	5.23
Gordon teachers	(17†)	21.1	3.02

If DS can be said to be attractive to professionally oriented educators, these data suggest that there was no unusual advantage in locating the project in Efstutt rather than in Gordon. If anything, the project would have been more congenial to the Gordon teachers.

Orientations of Efstutt team leaders. What of the role orientations of the Efstutt teachers who were selected for leadership positions? The DS rationale would lead one to expect that persons who assume key instructional and curricular responsibilities would be the more professionally oriented members of the staff.

* See Appendix A.

† Missing data for four Gordon teachers

Of course, in Efstutt the number of such positions was large in comparison to the pool of staff members from which they could be drawn, so the opportunity for selection could not be very great. The relevant data show this to be the case. Considering the six persons chosen as instructional and curriculum team leaders (recalling that one person filled both positions), tabulations indicate that they were *not* more professionally oriented teachers. The mean scores are in Table 7.

TABLE 7

MEAN PROFESSIONAL AND EMPLOYEE ROLE ORIENTATION SCORES FOR EFSTUTT TEAM LEADERS

	(Number)	*Professional Orientation*	*Employee Orientation*
Leaders, instructional and curriculum teams	(6)	16.3	22.0
Remaining instructional staff	(9)	17.4	23.3

If anything, the leaders were lower in professional orientation than the rank-and-file members of the instructional staff, and also lower in employee orientation, but the differences are too small to be dependable.

The firmest conclusion we can draw from the data, then, is that the leaders were nearly indistinguishable from other teachers with regard to their role orientations in this initial year of implementing differentiated staffing. What the implications might be for the implementation efforts we cannot say, nor can we speculate on how the situation might differ once a differentiated staffing plan has become well-established in a school.

GENERAL OBSERVATIONS

Several events occurred prior to, or just at the onset of, the implementation of differentiated staffing in the Efstutt school that are relevant to the measures of teacher attributes reported in this chapter: the Efstutt school was selected for the site of the DS project,

a team organization was formally instituted in the school and membership of the teams was established, and leadership positions of the team were filled. The most general conclusion we can draw on the basis of evidence regarding the instructional goals emphasized by staff members and their definitions of the teacher's role is that these early actions and events occurred without regard to three staff attributes that might have facilitated implementation.

1. The Efstutt teaching faculty did not differ appreciably from the faculty of the comparison school either in instructional objectives or in strength of orientation to the professional or employee role—and certainly not in a direction that would suggest an advantage to the Efstutt staff in implementing differentiated staffing.

2. Instructional teams were not so constituted in Efstutt that agreement among the teacher members concerning the goals of instruction was exceptionally high; in one team, goal agreement was nearly non-existent by our measure.

3. The key leadership positions were not filled by teachers distinctively different in their definitions of the teacher's role.

These observations assume that our measures of teacher attributes in May 1971 validly characterize staff members in September 1970. If one looks at the same data from the standpoint of the alternative assumption—that the measured attributes are products of the early events *and* eight months of implementation activity—he is forced to conclude that the Efstutt teachers ended up little different from teachers in a neighboring school who had not been through the experiences.

CHAPTER III

Tasks of Teaching

CASEA investigators were especially interested in measuring the *work system* of the school—the way in which the school's primary function, instruction, is organized and carried out by members of the instructional staff. While a number of techniques have been developed to measure instruction at the level of teacher-student interaction in the classroom, few have been devised for describing the work system as a whole, particularly in terms of staff behavior.

This chapter reports the results of one of our measurement approaches: the performance of teaching tasks. The following chapters report several other approaches. The question here is whether or not detectable patterns occurred in the kind and variety of tasks Efstutt teachers reported they were performing that could be attributed to the structural changes wrought in the school at the beginning of the year or to the strenuous efforts made in the succeeding months to implement DS. A comparison of the tasks with those performed by teachers in the Gordon school, who were operating under a conventional staffing plan, should reveal the points at which the DS project had had an effect on Efstutt's work system.

In one section of the questionnaire, teachers were presented with 67 specific tasks that might be performed in conjunction with the work of teaching. They were asked to indicate, for each task, whether or not they performed it at all and, if so, whether it occupied a "moderate" or "major" part of their time and effort. The tasks on the list focused on instruction and other classroom-related activities, whether performed in the classroom or outside it.*

The list was constructed so as to be sensitive to several aspects of the teacher's work that should change under a DS program were it operating according to its rationale. In particular, it sought to assess the following expectations: (1) that teachers would be relieved of the routine, non-instructional chores in the classroom and at least some of their activities of a quasi-instructional nature, (2) that they would be able to put greater time and effort into individualizing instruction, and (3) that they would have the opportunity to cultivate specialized competencies related to the instructional process. In addition, we expected (4) that a DS plan would confront teachers with several new responsibilities associated with the organization and management of instruction and would lead to the emergence of a managerial role among them. We will take up these expectations in turn.

A weighted score for tasks has been used in a number of the tabulations to follow. It was calculated by assigning the value of 2 to a task if it were said by a teacher to be one involving "major" time and effort, 1 if it were said to involve "moderate" time and effort, and 0 if the teacher said he never, or virtually never, performed it. An item's mean value was calculated from the responses of only the

* The measure of teaching tasks was derived from the instrument developed in CASEA's earlier Attributes Project. The original instrument contained an open-response question asking teachers to write a job description embodying the most important tasks they performed. The tasks to which teachers referred in their responses, then, helped form the list in the present instrument. For a partial and preliminary report on the original work, see Charles J. Dudley, *Task Structure, Allocation of Power, and Satisfaction of Organization Members in Six Schools*, CASEA Technical Report No. 1, September 1969.

grade-level teachers in the school—13 in Efstutt and 19 in Gordon.*

We should note at this point that the task instrument was designed to reveal trends in teacher response across classes of items rather than to permit item-by-item comparisons. This intention is all the more important to observe in the present situation where the number of responding teachers is so small. The judgments of just two or three teachers as to whether the time they devote to a task was "moderate" or "major"—a judgment that is subject to varying interpretations by teachers and even by the same teacher from time to time—can affect the item score by .15 or .20 points. As a "rule of thumb," we will regard differences of less than .20 between the schools as no difference at all but consistent patterns of difference greater than this as worthy of attention. A difference as large as .40 on a *single item* also is noteworthy, but the most relevant and useful way to compare schools in the data to follow is in terms of their *profiles* across groups of tasks.

Teacher Relief from Non-Instructional Chores

A prominent argument for DS is that, by introducing instructional and clerical aides in the school, professionally-trained teachers will be relieved of the manifold chores in elementary classrooms which can as well be performed by less skilled personnel. The provision of paraprofessional assistance, it is claimed, should enable teachers to devote their energies to the instructional tasks for which their training has best suited them.

The tasks listed in the instrument, together with item numbers, included the following:

Non-Instructional Routine

11. Doing bookkeeping chores (checking textbooks, attendance, lunch money, *etc.*)
17. Typing or duplicating materials to use in class

* The removal of subject teachers from the calculations is due to the fact that DS is envisioned as reducing the generalist character of the teaching job in the traditional self-contained classroom, and the rationale typically is not extended to teachers of specialized subjects, like art, music, or physical education, in the elementary school.

31. Conducting "housekeeping" chores (room cleaning and straightening, bulletin boards, *etc.*)
54. Monitoring hallways, playground, or lunch rooms

Quasi-Instructional Activities

22. Making out grade reports
25. Correcting assignments and written work
27. Keeping records on student progress and grades
40. Establishing classroom standards or rules
48. Holding parent conferences
50. Handling discipline and behavior problems
64. Administering teacher-made or standardized tests

Considering the large contingent of teacher assistants employed in Efstutt school as a key feature of the DS program, one might expect substantially lower scores for the performance of non-instructional routine, and perhaps somewhat lower scores for the quasi-instructional activities, among Efstutt grade-level teachers than Gordon teachers.

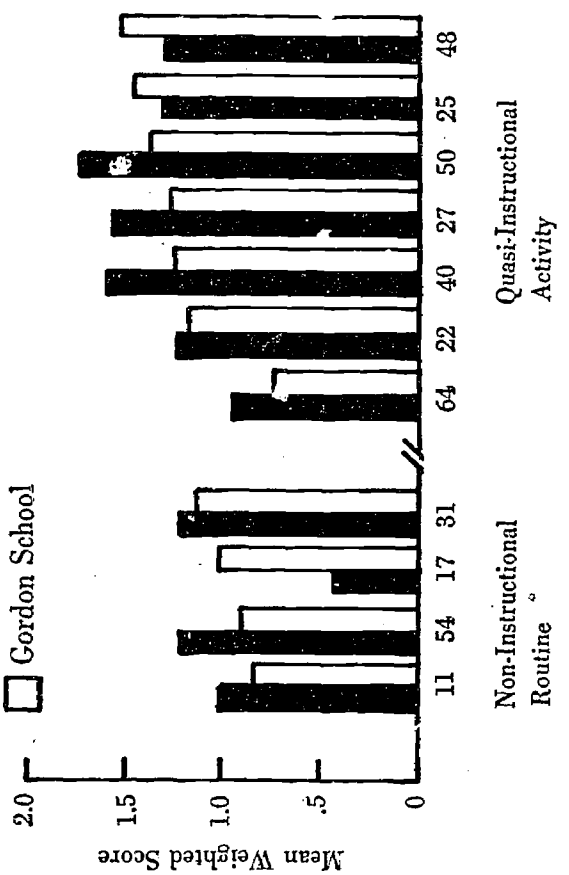
The item scores are displayed in Figure 1. (A score close to 2.0 indicates that the task was performed by many teachers and that most regarded it as one involving "major" time and effort.)

The profiles show that Efstutt teachers gained only one clear advantage over the Gordon staff in these non-instructional and quasi-instructional tasks. Efstutt teachers put considerably less time and effort into clerical activities (Item 17). Apart from this, item values were about the same in the two schools (*i.e.*, within .20 of one another), or the differences were such as to suggest that the Efstutt staff carried the *heavier* burden. The comparatively high value for Items 40, 50, and 54—relating to monitoring activities, behavior standards, and discipline—reinforce evidence elsewhere in the study that Efstutt teachers were inordinately occupied with problems of pupil control around the time the instrument was administered (spring). Whether or not this was in any way attributable to the DS implementation, however, cannot be determined definitively from the present data.

Thus, it is plain that Efstutt's large complement of paraprofessionals did not relieve classroom teachers to any substantial degree

FIGURE 1

TIME AND EFFORT DEVOTED TO NON-INSTRUCTIONAL AND QUASI-INSTRUCTIONAL TEACHING TASKS



from the non-instructional or quasi-instructional chores so common in elementary school teaching. Such chores appeared to be even more abundant in the experimental program.

The conclusion, however, should be considered in light of the fact that teacher assistants were not viewed in Efstutt as primarily responsible for taking over the teacher's housekeeping and clerical functions. Many of them were directly engaged in the instructional process itself.*

Individualization of Instruction

The involvement of aides in the instructional process bears on another argument for DS. It is said that by increasing the number of adults in the classroom, whether they be aides, student teachers, or additional certified teachers, the teacher is enabled to devote more of his time to working with small groups of students or individuals on learning projects designed uniquely for their needs. No longer must the teacher plan a standard course of instruction and cope single-handedly with a standard group of 25 to 30 students.

The task instrument included 14 items related directly to the teaching process—to activities in which teachers engage in preparation for instruction and to their instructional contact with students. A subset of these items makes specific reference to the teacher's concern for, or work with, individual students or small groups. If the general presumptions regarding the effects of DS on the individualization of instruction are true, and if the Efstutt staff had been successful in moving to a DS program by the end of the school year, the score values of the "individualization" tasks should be substantially higher in the Efstutt faculty than in the Gordon staff. (The scores were calculated as before, weighting a "major time and energy" response 2, a "moderate" response 1, and a "none" response 0.) The relevant items are listed below.

* For details of the work performed by teacher aides in Efstutt and elsewhere, see Chapter 5 in Robert B. Everhart, The Career of the Paraprofessional in Four Differentially Staffed Schools, Doctoral dissertation, University of Oregon, 1972. In this document, Efstutt is identified as "Hilltop."

Instructional Activities

12. Making out daily lesson plans
34. Guiding class discussions or recitations
36. Planning class assignments and projects
46. Locating and assembling instructional materials for class use
57. Presenting lessons and demonstrations
58. Planning the sequence of topics to be covered during the term
66. Making up tests and exercises for the class

Instructional Activities—Individualization

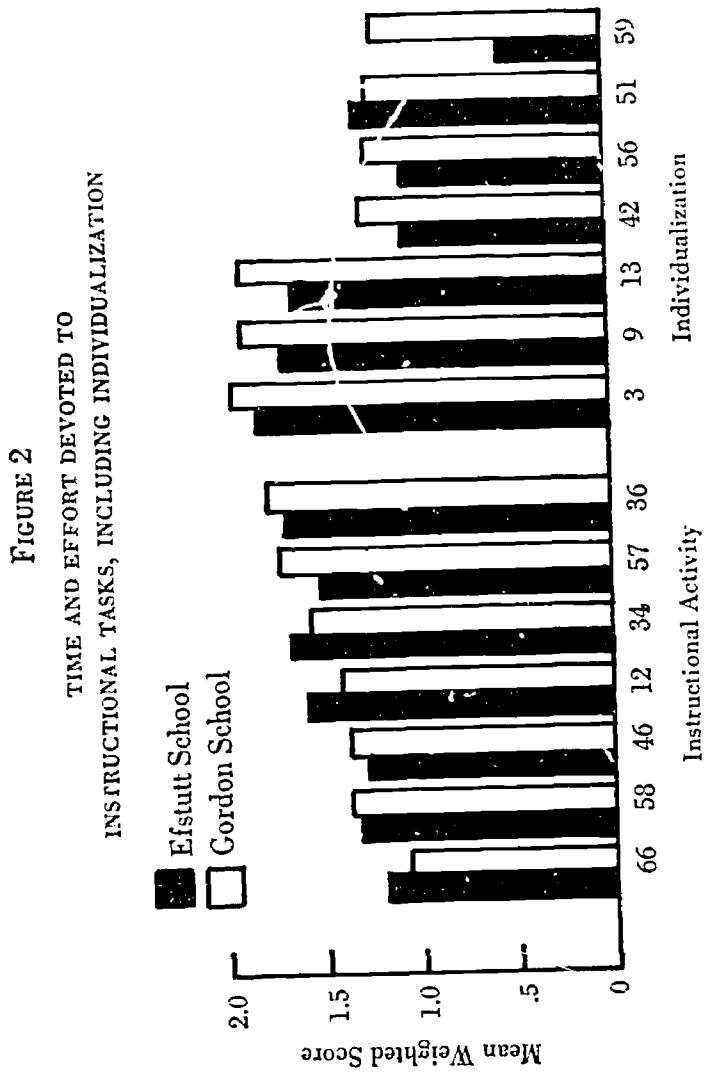
3. Giving assistance to individual students on class work
9. Working with individual students on their learning problems
13. Instructing or working with small groups of students
42. Guiding small groups of students on their own special projects
51. Doing diagnostic work on the learning difficulties of individuals
56. Helping students plan their own studies and projects
59. Holding special remedial sessions with students

Examination of the profiles of item scores for Efstutt and Gordon teachers in Figure 2 leads to two general impressions. First, instructional task performance in the two schools appears to have been quite similar. On only three of the 14 items was there a difference in item scores greater than .20. Second, with regard to the individualization items, the Efstutt teachers had slightly but consistently *lower* scores than Gordon teachers. For one of the items (Item 59) the difference was pronounced: few Efstutt teachers worked with students in remedial sessions. This difference could not be due simply to the presence of the reading specialist in Efstutt, a new position under the DS program, since the Gordon school similarly had a reading specialist.

As we will comment at the end of the chapter, interpretation of these data can go in several directions. Conceivably, Efstutt's classroom *teachers* displayed less individualizing behavior in the instructional process because that function was assumed by teacher *aides*. Alternatively, the demands of the DS project itself—the meetings, visitors, and general disruptions during the period of attempted transition to the new program—may have encroached on the teachers' time and energy for instruction. We will reserve our discussion of the findings until further analyses are reported.

FIGURE 2

TIME AND EFFORT DEVOTED TO INSTRUCTIONAL TASKS, INCLUDING INDIVIDUALIZATION



Teachers as Experts

Differentiated staffing in its mature form is supposed to promote specialized competencies and domains of expertise among members of the instructional staff, and team organization is supposed to provide the mechanism by which teachers can capitalize on one another's expertise in planning and conducting the instructional program. In order to assess the extent to which this objective of DS was being realized in Elstutt school, the task instrument included 17 items representing four areas in which teachers might choose to develop specialized knowledge and skills. The four areas are (1) curricular expertise, (2) instructional expertise, (3) evaluation expertise, and (4) child study and counseling expertise.

Curricular Expertise

7. Developing expertise in one particular curriculum area
14. Developing curriculum guides
26. Acquiring specialized knowledge about instructional packages and their use
32. Outlining curriculum objectives for a grade or subject area
63. Assembling a file of curriculum materials for a course of study
67. Advising fellow teachers on curriculum matters

Instructional Expertise

15. Demonstrating to other teachers instructional techniques with which you are familiar
24. Becoming an expert in using a particular instructional technique
28. Preparing and holding lessons for large groups of students (larger than class size)
49. Taping or otherwise recording lessons or demonstrations
61. Systematically studying others' teaching behavior

Evaluating Expertise

33. Writing behavioral objectives for individual students
37. Gaining technical knowledge about testing and evaluation procedures
47. Inventing new ways to evaluate achievement of class objectives

Child Study and Counseling Expertise

16. Making a study of social relationships among students in the class

29. Counseling students on their personal affairs
60. Conducting case studies of students with behavior o. learning problems

Scores for the grade-level teachers in Efstutt and Gordon are presented in Table 8. Inspection of the table reveals that teachers in neither school spent much time and effort cultivating expert knowl-

TABLE 8

MEAN SCORES OF EFSTUTT AND GORDON TEACHERS ON TASKS REPRESENTING THE DEVELOPMENT OF SPECIALIZED EXPERTISE

Area and Item Number	*Efstutt (N=13)*	*Gordon (N=19)*	*Difference†*
Curricular Expertise			
7	.69	1.28*	−.59
14	.46	.26	.20
26	.46	.58	
32	.69	.74	
63	.69	.79	
67	.62	.32	.30
Instructional Expertise			
15	.23	.50*	−.27
24	.77	.72*	
28	.85	.16	.69
49	.23	.72*	−.49
61	.46	.53	
Evaluation Expertise			
33	.31	.78*	−.47
37	.54	.83*	−.29
47	.46	1.03	−.57
Child Study and Counseling Expertise			
16	.38	.63	−.25
29	.85	1.03	
60	.62	.58	

* N = 18

† Only differences of .20 or greater are shown. The negative sign indicates that the mean score was smaller in Efstutt than in Gordon.

edge and skills in any of the areas. Only on five items did the average scores exceed .80. On the whole, the values of the expertise items were markedly below virtually all of those in Figures 1 and 2 relating to classroom instruction and other teaching chores.

Nor were the low scores caused by our averaging procedure. Conceivably, a few teachers in the schools could concentrate their energies in different ones of the four areas, remaining uninvolved in the other three, thereby reducing the item values when averaged over all teachers. We made a supplementary analysis, however, indicating that no teacher, either in Efstutt or Gordon, devoted a major share of his energy to activities in just one of the domains. Rather, the teachers tended to distribute whatever time and effort they could mobilize across activities in several of the areas. This hardly constitutes the cultivation of specialized expertise.

From the comparative viewpoint, Table 8 also suggests that the Efstutt faculty was *less* engaged in developing expert competencies than the Gordon faculty. Considering only those activities in which a reasonably substantial difference appears—a difference of at least .40—only one was higher for the Efstutt staff. Members of the Efstutt faculty, apparently, focused efforts on developing techniques for large-group instruction to an extent unparalleled in the Gordon school (Item 28). This certainly is in keeping with the DS plan for forming groups of varying sizes and suiting the mode of instruction to them. But the other three notable item differences (Items 7, 33, and 49) indicated greater activity in the Gordon school.

Emergence of the Managerial Role

It is reasonable to believe that a fully operating DS program would introduce an essentially new dimension in the classroom teacher's role. Teachers would be obliged to assume a number of managerial functions ordinarily performed by the school principal or other administrative personnel and additional functions heretofore not needing to be executed. If instruction literally were planned and conducted in a team context—the team consisting of a mix of teachers, aides, support specialists, and other personnel acting in a closely interdependent fashion—the lot would fall on the team

leader and members together to handle the inevitable problems of coordination.

Several items were included in the task instrument in order to observe the emergence of the managerial role among classroom teachers in the DS school. The first two items below relate to the supervision of aides, interns, and student teachers; the remainder concern matters of instructional coordination and decision-making.

Supervisory Functions

39. Assigning duties to teacher aides or assistants
44. Supervising the work of interns or student teachers

Instructional Coordination and Management

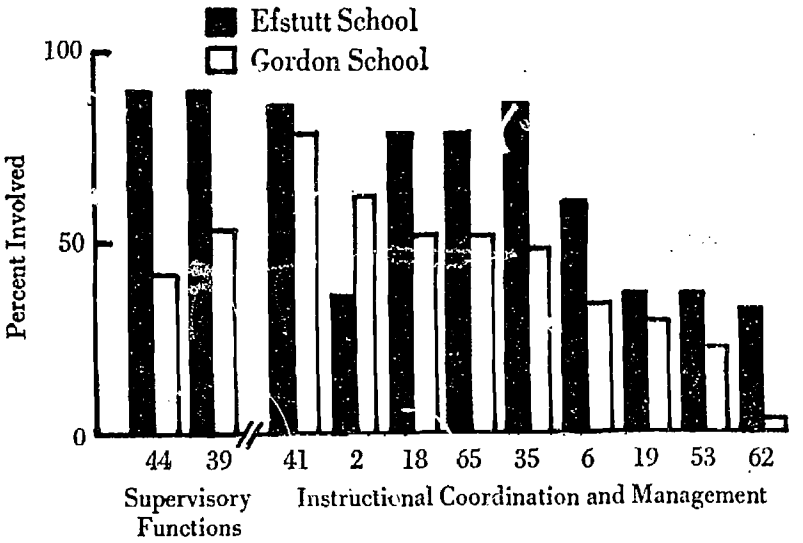
2. Deciding with other teachers the grade reports students should receive
6. Scheduling and coordinating the assignment of aides to teachers
18. Conferring with other teachers on the use of classroom space
19. Coordinating the instructional program for a team of teachers
35. Helping decide on appropriate student groupings with other teachers
41. Working with others to select instructional materials for a class
53. Determining with other teachers who will handle which lessons for a class
62. Handling administrative tasks for a group of teachers
65. Working out daily or weekly class schedules with other teachers

Faculty responses to the items (Figure 3) are reported as the simple percentage of grade-level teachers who indicated they performed the activity at all, irrespective of amount of time and effort they said they devoted to it.

As the profiles in Figure 3 demonstrate, the Efstutt faculty stands in distinct contrast to the Gordon staff in regard to the performance of these management tasks. All but a few Efstutt teachers were involved in supervisory responsibilities, a fact that reflects, of course, the large presence of aides and student teachers in their school. In addition, comparatively high proportions of Efstutt teachers were

FIGURE 3

TEACHER INVOLVEMENT IN INSTRUCTIONAL MANAGEMENT TASKS



engaged with their colleagues in such activities as allocating classroom space, scheduling classes, and grouping students for instruction, and nearly one-quarter said they handled administrative tasks for their colleagues. Significantly, however, the item concerning joint decisions on students' grades, presumably a mark of close instructional interdependence among teachers, favors Gordon school rather than Efstutt. Also, nearly as many Gordon teachers as Efstutt teachers said they worked with their fellows on the selection of class materials.

One of the more illuminating observations to be drawn from Figure 3 is the sizable number of teachers who performed the supposedly "new" managerial functions, even in the conventional school. Perhaps the managerial role is not so new after all, or possibly the Gordon school was not as conventional as initially conceived. Data subsequently obtained from teachers in a smaller Oregon school system (not presented here) suggest both to be the case: some teachers in all of the system's seven elementary schools reported engaging in the managerial activities, but not as many, proportionally, as in the Gordon school.

Team leaders and the managerial role. One might expect, under a differentiated staffing scheme, that team management functions would be concentrated in the formally designated leaders, although certain of the activities necessarily would implicate all teachers. Close inspection of who, among Efstutt teachers, said they performed the various managerial tasks disclosed that the tasks did *not* devolve uniquely on the three instructional team leaders. In fact, the leaders were no more often implicated in them than the remaining faculty, even in the activities most likely to fall on a single individual. Three Efstutt teachers, for example, reported that they "handled administrative tasks for a group of teachers;" only one of them was a team leader. Four said they "coordinated the instructional program for a team"; two were team leaders and two were not.

Thus, we found no indication that a division of managerial responsibility had arisen during the year to help define the role of the instructional team leaders in Efstutt. The responsibilities were widely shared without regard to formal position.

General Observations

One is more impressed, perhaps, by the similarities than by the differences between the two schools in the nature of tasks performed by teachers. Six tasks were regarded as a major component of elementary teaching by virtually all teachers in both schools (and, we might add, in the smaller Oregon system where additional responses were collected). They are:

3. Giving assistance to individual students on class work
9. Working with individual students on their learning problems
13. Instructing or working with small groups of students
34. Guiding class discussions or recitations
36. Planning class assignments and projects
57. Presenting lessons and demonstrations

These lie in the domain of what one writer has called "the core skills of teaching" and clearly reflect the central importance in the teacher's role of direct instructional contact with students.* In the view of teachers, this is the essence of teaching. A variety of other tasks are performed universally in support of this central function—planning and preparing for classroom teaching, correcting assignments, dealing with matters of pupil control, and making records and reports—but are not accorded the importance of direct work with students. In any event, teachers in the Efstutt and Gordon schools were substantially alike in their performance of these activities.

The specific comparisons of task performance reported in this chapter suggested the following:

1. The large contingent of paraprofessionals in Efstutt did not effectively relieve classroom teachers from the burdens of non-instructional routine, except with respect to certain clerical functions; nor, perhaps, were they expected to. If anything, the burdens were heavier on the Efstutt teachers than on the Gordon teachers, particularly with respect to problems of pupil control.
2. The presence of aides and student teachers in Efstutt involved

*Dan C. Lortie, "The Balance of Control and Autonomy in Elementary School Teaching," in Amitai Etzioni (Ed.). *The Semi-Professions and Their Organization.* New York: Free Press, 1969. Chapter 1.

classroom teachers in matters of scheduling, assigning, and supervising their work.

3. The Efstutt teachers devoted less of their time and effort to work with individuals or small groups of students than did the Gordon faculty. Whether or not teacher assistants took up the slack we do not know, although this possibility is consistent with other studies of aide use.*
4. Few teachers in either school were concerned with cultivating specialized expertise, and certainly not more so in Efstutt than Gordon. It is important to note, in this regard, that the type of expertise in question requires teachers to engage in activities which essentially would remove them from direct instructional contact with students. Many of the items refer to activities like reading, studying, observing, and writing. Conceivably, only a small and selective number of classroom teachers would be attracted to "studious" kinds of activity that take them away from what is generally regarded as the essence of the teaching role, even if freed to do so under a DS plan.
5. Efstutt teachers were deeply involved in management functions associated with the organization and conduct of instruction, although surprisingly, teachers in Gordon, the more conventional school, were similarly involved, albeit to a lesser degree. The Efstutt faculty devoted substantial portions of time and effort to such problems as scheduling, student grouping, and the allocation of classroom space. Leaders of Efstutt's instructional teams were no more involved in these managerial tasks than rank-and-file teachers. In light of evidence to be presented in the next chapter indicating that the interdependence in teaching activities was not especially great at Efstutt, it is not entirely clear why instructional coordination and management issues should have been so demanding.

In short, the assembled evidence demonstrates little effect of the first year of DS implementation on teacher work activities of the salutory kind anticipated from a differentiated staffing plan.

Eight months may be too brief a period, of course, in which to expect basic alterations in roles and modes of relationship among members of a school staff. It is necessary to consider an intruding

* Eaton H. Conant, *A Cost-Effectiveness Study of Employment of Non-professional Teaching Aides in Public Schools.* U.S. Department of Health, Education, and Welfare, Office of Education, Final Report of Project OE 8-0481, 1971.

factor that is often overlooked by proponents of innovation: the disruptions of routine, the irregularities and uncertainties, and the demands on time which a change project itself imposes on a staff. Our case-study documents reveal the extraordinary investment that participation in the DS Project required of teachers over and beyond their usual instructional duties—workshops, speakers, trips to other schools, worried parents, nervous administrators, visiting firemen, evaluators, planning meetings, crisis meetings, and so on. Simply accommodating to a large, new class of personnel in the school—the paraprofessionals—was a major task in its own right.

The salience of the extraordinary demands was caught up in responses to one of the items on our task instrument: "Attending school meetings." While practically all teachers in Efstutt and Gordon said they attended meetings, three-fourths of the Efstutt teachers regarded meeting attendance as a *major component* of their work; only one Gordon teacher did so. The figures are shown in Table 9.

TABLE 9

AMOUNT OF TIME AND ENERGY DEVOTED TO ATTENDING SCHOOL MEETINGS EFSTUTT AND GORDON TEACHERS

	Number of Teachers	
	Efstutt	*Gordon*
Major time and energy	10	1
Moderate time and energy	3	17
None, or virtually none	–	1
Total	13	19

Thus, the very process of implementing change, as incorporated in Efstutt's DS project, may well have had the short-run consequence of distracting the staff from realizing the project's long-run objectives. The special events and disruptions associated with the project competed for teacher time to individualize instruction, work out rela-

tionships with aides, cultivate expertise, and so on. The frequent interruptions of schedule may have been responsible for the apparent necessity of Efstutt teachers to attend to issues of instructional management. It is even conceivable that the greater emphasis on student decorum, discipline, and monitoring activities in Efstutt, reflecting a breakdown in the customary pupil control mechanisms so well institutionalized in conventional schools, had the same roots—in what might be called the disruption effect of innovation.

CHAPTER IV

Division of Instructional Labor, Interdependence, and Communication

In principle, differentiated staffing calls for a radical change in working relationships among teachers. It implies that teaching will be carried out by closely interdependent members of instructional teams who, in time, may develop an informal division of labor among themselves. CASEA researchers, correspondingly, were concerned with measuring the relationships among instructional agents of the school as these help to characterize the school's work system. This chapter describes three features of staff relationships in Efstutt and Gordon schools: the division of instructional labor, work interdependence, and staff communication.

Division of Labor by Surject Area

The dominant division of instructional labor in American elementary schools is along age-grade lines rather than subject lines. Although many schools have one or more special subject teachers in such areas as physical education, music, art, foreign language, or

vocational arts, the vast majority of classroom teachers are "grade specialists and subject generalists." A DS plan is often seen as a means of achieving greater differentiation by subject area—permitting the teachers within a team to "teach to their strengths," particularly with regard to the key subjects of the curriculum. While other bases for dividing the instructional labor may evolve in a team, DS typically is taken to imply the development of subject-area expertise at the elementary-school level.

The task instrument described in the preceding chapter included among its 67 items the following eight, which teachers rated as 0, 1, or 2, indicating that they devoted virtually none of their time or effort to the activity,"moderate" time or effort, or "major" time or effort, respectively.*

20. Teaching science
21. Teaching social living
43. Teaching arithmetic
45. Teaching language arts
5. Teaching art
8. Teaching music
23. Teaching physical education
4. Teaching vocational subjects

Teacher responses to these items can be used to verify the gross pattern of teacher assignment in the school ordinarily available from other sources of information, but they also may detect informal departures along subject-matter lines among members of instructional teams. In particular, they can be examined for evidence that implementation of DS in the Efstutt school had reduced the "subject generalist" character of the grade-level teachers in the key areas of science, social living, arithmetic, and language arts.

Responses of individual teachers to the eight items were laid out on a grid to reveal the patterns of teaching responsibility. None of the teachers in either Efstutt or Gordon reported teaching vocational subjects, and almost no one said he taught physical education

* These items were omitted from the secondary-school form of the task instrument.

or music other than the special teachers in those areas, a fact that verifies the formal pattern of staff assignment in the schools.

In Efstutt *all* grade-level teachers devoted time to teaching science, social living, arithmetic, and language arts, and all but three indicated they also taught art.* In this regard, the Efstutt grade-level teachers did not differ from those in Gordon who, with some exceptions on which we will comment momentarily, similarly taught all of the key subjects. Thus, it became apparent that the DS implementation efforts in Efstutt had not as yet produced a division of labor which reduced the range of subject areas for which the grade-level teachers were responsible.

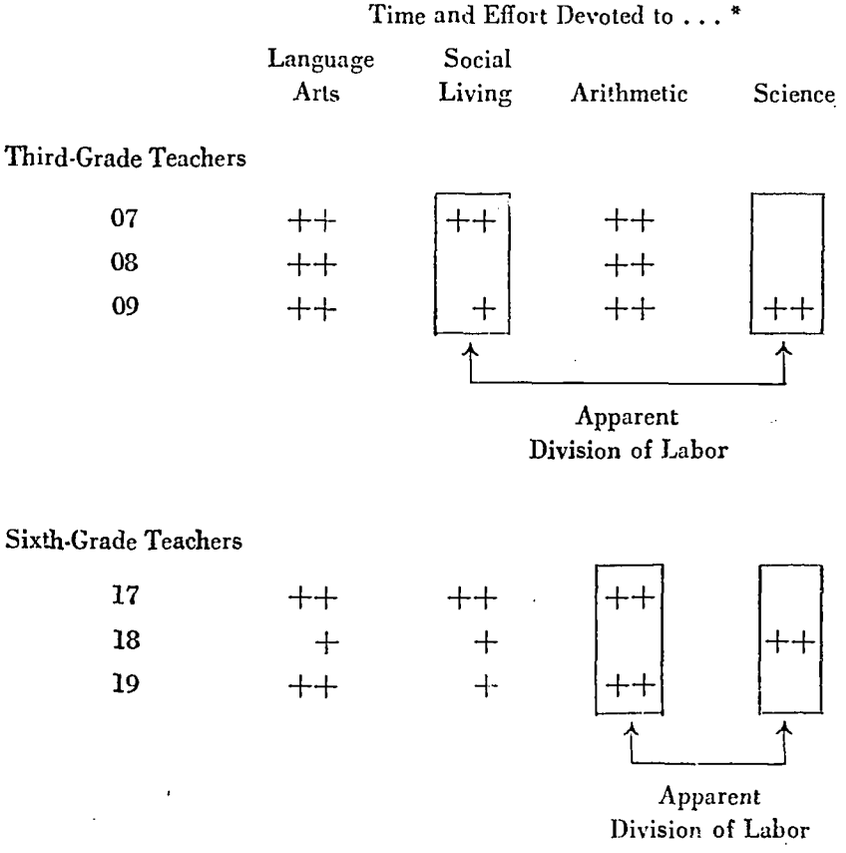
Interestingly, two instances of an informal division of instructional labor appeared in Gordon, the non-DS school. One was among third-grade teachers and the other at the sixth-grade level. The detailed response patterns are displayed in Figure 4. (Our principal purpose in showing these data is to illustrate how items in the task instrument may be analyzed to detect *possible* instances of the division of labor. Single responses of single teachers, of course, are hazardous to interpret, since they are bound to reflect in some degree errors of measurement such as misperceptions or misjudgments of items, momentary distractions, fatigue, and the like. The patterns of response, however, do point to situations warranting the collection of supplementary information.)

It would seem that the three third-grade teachers worked out a division of labor such that one teacher took sole responsibility for teaching science and another took primary responsibility for teaching in the social living area. The third member of the group, Teacher 08, was able to capitalize on the pattern of exchange without, herself, making a unique contribution; she was enabled to concentrate on language arts and arithmetic. A different pattern apparently existed among the sixth-grade teachers. In this instance, Teacher 18

* Efstutt's original plan to add an art teacher to the staff at the beginning of the year was not realized. However, one of the paraprofessionals employed under the DS project was a talented commercial artist just completing his work for a teaching certificate, and, until he resigned toward the end of the year, he assumed responsibility for some of Efstutt's art instruction in the upper grades.

FIGURE 4

INDICATION OF INFORMAL DIVISION OF INSTRUCTIONAL LABOR AMONG GRADE-LEVEL TEACHERS IN GORDON SCHOOL



* Two plus signs (++) indicate "major" time and effort, one (+) indicates "moderate" time and effort, and a blank indicates "none, or virtually none."

seems to have developed something of a specialty in the science area, teaching this subject to students of the other two teachers. In return, she was relieved by them of teaching arithmetic to her class.

We do not know precisely how these exchanges were managed without more intimate information, but it is likely that they were more on the order of what some have called "turn teaching" than of *bona fide* teaming. Such informal exchanges of classes are fairly common in conventional elementary schools. The pertinent fact for our study, however, is that indications of reduction of the "subject-generalist" character of classroom teachers were found in the conventional school rather than in Efstutt where the DS plan was supposed to maximize such reductions.

Curriculum teams in Efstutt. Four curriculum teams were established at the beginning of the school year in Efstutt—in science, language arts, social studies, and math—to direct curriculum design activities for the school and to promote staff development in the subject areas. Each grade-level teacher was assigned to one of the teams, presumably to develop a degree of specialized competence within the area. The extent to which curriculum team operations were effective in promoting or reinforcing subject specialization should be indicated by teachers' ratings of the relative emphasis they gave to the various subjects in their teaching.

Figure 5 shows grade-level teachers' ratings of the time and effort devoted to four subject areas corresponding to the curriculum teams on which they held membership. If the curriculum teams had promoted subject specialization, one would expect a predominance of ++'s (indicating "major" time and effort) in the main diagonal of the figure, as set out by the boxes, and a predominance of +'s ("moderate" time and effort) outside the main diagonal. Again, caution must be exercised in interpreting single responses of individual teachers.

It is apparent from the figure that curriculum team membership had little bearing on teachers' distribution of effort in their classroom instruction. A teacher was no more likely to devote major effort to the subject with which his curriculum team dealt than to the other subject areas. Nor did team leaders (identified by a

FIGURE 5

TEACHING EMPHASIS IN FOUR SUBJECT AREAS
AMONG CURRICULUM TEAM MEMBERS IN EFSTUTT SCHOOL
(GRADE-LEVEL TEACHERS)

Curriculum Team and Members	Time and Effort Devoted to . . . *			
	Language Arts	Social Living	Arithmetic	Science
Language Arts				
**10	++	++	++	++
02	++	+	++	+
06	++	++	++	++
Social Studies				
**08	++	++	+	+
01	++	++	++	++
11	++	+	++	+
Mathematics				
**09	++	+	++	+
04	++	+	+	+
07	+	+	+	+
13	++	++	++	++
Science				
**12	+	+	+	+
03	++	+	+	+
05	+	+	+	+

* Two plus signs (++) indicate "major" time and effort, one (+) indicates "moderate" time and effort.

** Curriculum team leader.

double asterisk in Figure 5) place unique emphasis on the particular subject in their teaching. By this test, at least, the curriculum teams did not seem to be fulfilling their promise.

Interdependence of Instructional Tasks

Instructional agents may work together in a closely interdependent teaching system, of course, without dividing the labor along subject-matter lines, and this could have been the case in Efstutt school.* We sought to assess directly the extent of work interdependence by asking teachers to name and identify by position other staff members who worked collaboratively with them. The method entailed asking teachers two questions, only the second of which was subjected to analysis.† The questions were:

> In performing your job as a teacher, you may (or may not) rely upon other persons (besides your students) for assistance or collaboration in getting your own work duties performed. Please list below, by name and position, the persons upon whom you rely most heavily to get *your own work tasks* accomplished.
>
> Who are the persons listed above, if any, whose job is so closely related to your own that you believe the two jobs must be performed *collaboratively* in order for either of you to perform his work effectively?

Names given by teachers in response to the second question were

* There are theoretical grounds for believing that subject differentiation actually inhibits the development of a closely interdependent work system in teaching.

† Questions nearly identical to these had been used in an earlier CASEA project, the Attributes Project. A detailed study of responses to those questions revealed a strong proclivity on the part of teachers to list persons upon whom they depended for ideas, succorance, and "moral support" in their work and not just persons with whom they had intimately interdependent working relationships. This was particularly true of responses to the first question. Our efforts to rework the question to focus it more directly on task interdependence did not improve the situation in a trial run of the questionnaire; it was as though respondents *had* to tell us who on the staff was psychologically important to them before they could concentrate on the few (if any) who were true collaborators. In the end, we retained both questions but regarded only responses to the second as the critical indicator of task interdependence.

tabulated in a "nominator-nominee" matrix, listing responding teachers in rows and other staff members whom they "nominated" in the columns. An x was entered at the intersection of a row and column to indicate that a teacher included a particular staff member in his list. Since not all potential nominees in the schools were given the opportunity to be nominators (only teachers responded to the questionnaires), it was not possible always to determine whether or not the nominations were reciprocated. In the present analysis, we stipulated that two people were interdependent whenever one person nominated the other, regardless of reciprocation. Inspection of the matrix enables one to determine the extent of work interdependence in the school and to observe the particular patterns it takes.

We have not reproduced the matrices prepared for Efstutt and Gordon faculties in this report, but we will cite a number of prominent facts about work interdependence that our inspection revealed.

1. *Among teachers.* There were *no* nominations of interdependence between grade-level and subject-area teachers (of music and physical education) in either school and remarkably few between the grade-level teachers themselves. Only two of a possible 78 pairs of grade-level teachers were so linked in Efstutt and six of a possible 171 in Gordon.* These few linkages invariably connected teachers at the same grade level, even in Efstutt where instructional teams were established across adjacent grade levels. Thus, task interdependence in the instructional staff was as minimal (if not more so) in the school seeking to implement DS as in the more conventional school.†

* If we count only *reciprocated* nominations between grade-level teachers, which is feasible inasmuch as all teachers responded to the questionnaire, the number of linkages reduces to one in each school.

† Two other analyses deserve comment. Three of Gordon's six linkages occurred among sixth-grade teachers, precisely where the data reported in the preceding section on the division of instructional labor would lead us to expect. The other three linkages in Gordon, however, were *not* among the third-grade teachers as expected (see Figure 4) but among teachers of the fourth grade. It would appear that interdependence nominations are indicative of collaborative activities beyond those arising from the division of labor by subject area and not necessarily of these.

In Chapter II we referred to teacher agreement on instructional objectives as

2. *Teachers and higher echelons.* In Efstutt, just one teacher mentioned the occupant of the new instructional coordinator position as someone with whom he worked in close collaboration. No one listed the principal in either school.

3. *Teachers and support specialists.* Teacher nominations of interdependence with support specialists (IMC coordinator, special reading teacher, Efstutt's counselor) were infrequent in both schools, but they were more common in Gordon than Efstutt.

4. *Teachers and aides.* A host of interdependencies arose in Efstutt school between instructional staff members and the clerical and teaching aides assigned to them, far outnumbering all other linkages combined. This feature clearly distinguished Efstutt from Gordon school where, apart from a secretary and aide in the principal's office, no such assistance was available to teachers. (See Table 1, Chapter I.)

In sum, close task interdependencies among staff members were rare in the two schools, with one impressive exception: the DS program, by importing paraprofessionals directly into teachers' classrooms and by providing clerical assistance to use at teachers' discretion, gave rise to a new and obviously important system of relationships in the Efstutt school. While the relationships were not without their problems, by the end of the year over half of the grade-level teachers reported that aides were essential to the performance of their tasks.* It is instructive to observe that the relationships were

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a possible prerequisite for close collaboration. It is interesting to note that the two instances of interdependence in Efstutt school occurred in the so-called 3-4 team, the team with the highest agreement rate in the school. Indeed, each of the two pairs of interdependent teachers (the two third-grade teachers and the two fourth-grade teachers) were in full agreement by our criterion—a rate of 100 percent. Parallel calculations in Gordon, however, cast doubt on the proposition that agreement is a necessary condition of interdependence: only two of Gordon's six pairs of interdependent teachers (33 percent) met our agreement criterion.

* The case-study materials make it clear *how* classroom aides were essential to teachers. Class sizes under the DS program had increased to 35 or 40 pupils, far more than Overland elementary teachers were accustomed, and they had little choice but to rely on teacher assistants to make the crowded situations manageable. But therein lay the roots of the numerous difficulties that plagued the relationship. Inexperienced adults in the classrooms on truncated time schedules generally were incapable of lending the kind of assistance teachers required,

established essentially on a one-to-one basis between the teacher and "his" assistant. This was true in spite of the fact that aides were assigned ostensibly to instructional teams. But the teacher assistants were sufficiently numerous that virtually every teacher could be assigned his own, and with regard to the team's clerical aide, his services were simply parcelled out to the teachers according to an equitable time schedule.

Aside from the teacher-paraprofessional relationship, staff interdependencies in Efstutt did not look much different from those in Gordon: among grade-level teachers, almost non-existent, and between teachers and support specialists, infrequent. Teachers in both schools worked autonomously with respect to one another, and Efstutt's instructional teams were teams in name only.

Staff Communication

Another way to examine task interdependencies among teachers is to observe their communication behavior—*i.e.*, how much they talk to one another about matters directly concerning their work. Close collaboration in a task as complex as classroom teaching necessarily entails frequent exchanges and discussions between the collaborating parties about the work at hand.

For this purpose we drew on, and extended, a procedure used by Meyer and Cohen of Stanford University to measure staff communication in their study of open-space schools.* We asked teachers to note the frequency with which they talked to other teachers, to teaching assistants, and to the principal about a number of topics. The topics represent what we have called "task-related communication":

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and in some ways they simply exacerbated the teachers' problems. See John E. Jones, An Elementary School under Conditions of Planned Change, Doctoral dissertation, Syracuse University, 1973.

* John Meyer and Elizabeth Cohen, *The Impact of the Open-Space School upon Teacher Influence and Autonomy: The Effects of an Organizational Innovation.* Technical Report No. 21, Stanford Center for Research and Development in Teaching, Stanford University, Stanford, California, 1971.

Task-related communication

a. General curriculum plans for the class
b. The schedule of teaching activities
c. Getting teaching resources or supplies
d. Student reactions to a specific lesson
e. Learning needs of a particular student

Expressive communication

f. Personal gripes or concerns about work
g. Matters unrelated to school and teaching

The last two of the task-related topics (*d* and *e*) were thought to bear on the most immediate aspects of the instructional process and, thereby, would be especially indicative of the intimacy of teachers' involvement in joint teaching. We included the expressive topics in an effort to emphasize the distinction between this extremely common form of sociable communication and the narrower, task-related variety.

For each of the seven topics, teachers checked the frequency with which they talked with other teachers, teaching assistants, and the principal. The frequency categories were:

Category	*Weight*
Very often (daily or several days a week)	5.0
Fairly often (weekly)	1.0
Fairly infrequently (biweekly or monthly)	.5
Rarely (bimonthly or each semester)	.1
Never	0

Category weights roughly approximate the absolute magnitude of differences between the categories. For example, a frequency of "daily or several days a week" can be regarded as approximately five times greater than that of "weekly" communication.

Using this weighting scheme, mean scores were calculated for all members of the instructional staffs of Efstutt and Gordon schools, including both grade-level teachers and special subject teachers, but excluding the support personnel. A mean score of 1.00 indicates that the average teacher was engaged with the other party in a discussion of the topic about once a week.

The results of the calculations are summarized in Table 10. There

are a number of comparisons of communications scores that can be made in this table and, while our primary interest is in the direct comparisons between Efstutt and Gordon schools, some of the others are quite illuminating. We will focus first on teacher communication with other teachers and with the principal, reserving until last the most noteable feature of the data—communication with aides. Figure 6 may help the reader to visualize our first comparisons.*

TABLE 10

MEAN COMMUNICATION SCORES FOR INSTRUCTIONAL STAFF MEMBERS IN EFSTUTT AND GORDON SCHOOLS ON SEVEN TOPICS*

	Task-Related Topics					*Expressive Topics*	
Teacher communication	*a*	*b*	*c*	*d*	*e*	*f*	*g*
With Other Teachers							
Efstutt	1.3	1.6	1.3	1.0	1.0	1.8	2.8
Gordon	1.2	.6	1.0	.7	1.8	1.2	3.8
With Principal							
Efstutt	.2	.2	.2	.2	.1	.6	.8
Gordon	.4	.2	.5	.3	.7	.3	1.0
With Assistants							
Efstutt	2.8	2.9	2.0	2.3	2.4	1.4	2.7
Gordon	.2	.6	.3	.6	.8	.3	.4

* Grade-level and subject teachers. Efstutt N = 15; Gordon N = 21.

The predominance of "non-shop talk." Clearly, teachers in both schools spent more of their time talking about things unrelated to their work—"non-shop talk"—than about any other topic on the list. This is true whether they were talking among themselves or to the principal. Our data on individual teachers indicated that there were very few in either school who did not participate regularly in these sociable contacts with their colleagues.

* As in earlier chapters, interpretation of the data must rely primarily on general trends rather than on individual items. In light of the variability in teacher communication behavior, we will regard a difference between school means as substantial if it is approximately 1.0 or greater (.5 or greater when comparing teacher communication with the principal).

The volume of the "non-shop talk" was substantially greater in the Gordon school than in Efstutt. On the other hand, gripes and concerns about work—the other form of expressive communication —was greater in Efstutt than in Gordon. Whether or not this reversal is attributable to the turmoil of implementing a major change in instructional organization our data do not tell us, but it is reasonable to believe that it is.

The topics of task-related communication. Task-related conversations among teachers were comparatively infrequent in the two schools. The calculations suggest that teachers talked to fellow teachers about the various matters connected to the instructional program on the average of a little over once a week.

Some noteworthy differences in the topics of these work conversations can be seen between the schools. Discussions about the teaching schedule were considerably more prominent in Efstutt than in Gordon, reinforcing the observation made in the preceding chapter concerning the salience of scheduling problems in that school. Gordon teachers reported talking among themselves about the learning needs of particular students nearly twice as frequently as the Efstutt teachers, and the Gordon principal, similarly, was heavily implicated in such discussions. Again, this adds to the evidence from the previous chapter suggesting that the Gordon faculty, not Efstutt's, may have been in the better position to concentrate on individualizing instruction during the year.

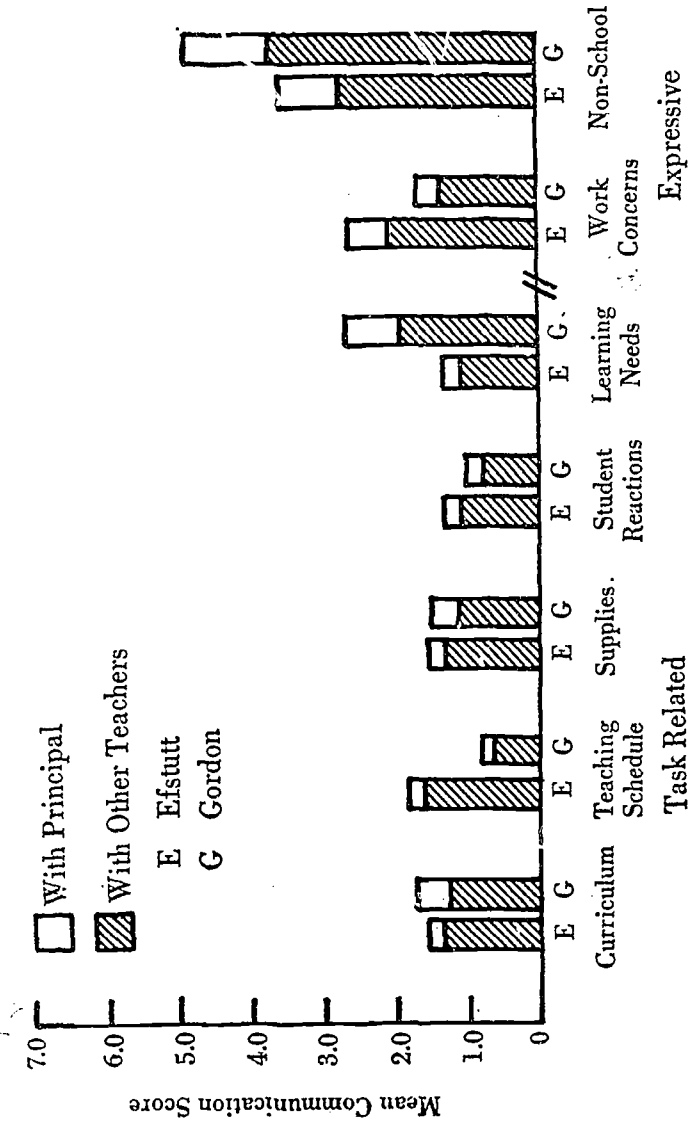
The *in*frequency with which Efstutt teachers talked to one another about student reactions to particular lessons is especially noteworthy, considering that such discussions would be the hallmark of intimate collaboration in the teaching task. The frequency was about the same as in the conventional school.

The principal's role in communication. Apparently, communication with principals about instructional affairs was rather minimal in both schools. When teachers talked to their principal, it was most often about matters of a "non-shop talk" variety.

The Gordon principal, however, seemed to be more involved in task-related communication than Efstutt's. This is especially notice-

FIGURE 6

FREQUENCY OF TEACHER COMMUNICATION WITH OTHER TEACHERS AND THE PRINCIPAL IN EFSTUTT AND GORDON SCHOOLS



able in discussions of the learning needs of individual students. The greater centrality of Gordon's principal is documented in another way. We tallied the number of teachers who said they talked to their principal about one or another of the task-related matters at least once a week and found that eight of the 21 grade-level and subject teachers in Gordon made such a claim in contrast to two of the 15 Efstutt teachers.

It is important to point out, before invidious conclusions are drawn, that one feature of the DS plan in Efstutt was the interposition of an instructional coordinator between the principal and teachers. Conceivably, Efstutt teachers may have been directing their discussion about teaching issues to that party rather than to the principal (although the case-study observations and our data on task interdependence tell us this was not generally true). Alternatively, the differences may have been due to administrative styles, to the fewer number of inexperienced teachers in Efstutt, or even to the principal's distraction by DS project demands. Data in the previous chapter indicated that Efstutt teachers assumed an unusually heavy responsibility for instructional management tasks, taking over a number of functions normally reserved to the principal. Whatever the reasons, it is clear that the principal did not figure prominently in Efstutt's instructional work system.

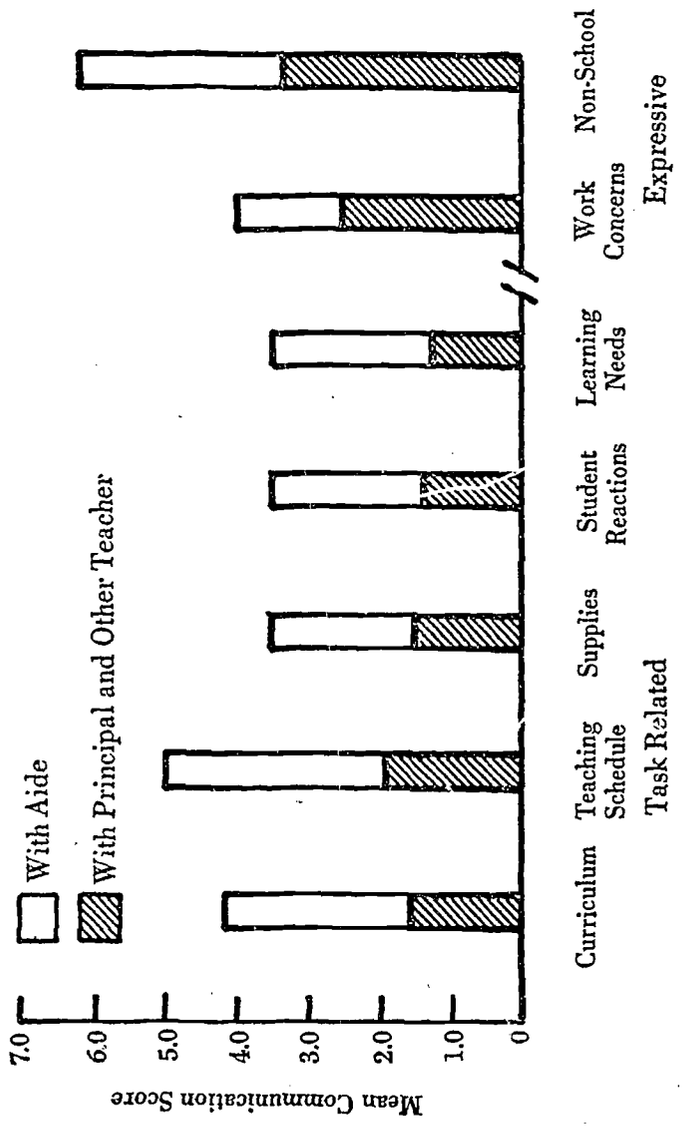
The profound effect of teacher aides. The presence of teaching assistants in the classrooms of Efstutt markedly expanded the volume of teacher communication, and especially that related directly to the teaching task. Task-related communication increased by a factor of 2 to 3 as a function of the paraprofessionals. Figure 7 shows the dramatic impact.*

It is clear from Figure 7 that the introduction of a large contingent of paraprofessionals in Efstutt significantly altered the char-

* Since a few teachers in Gordon school also had access to "teaching assistants," mainly student and parent volunteers, slight expansion of communication was exhibited there as well. Considering the fact that the great majority of Gordon teachers were without such assistance, the average values for the school were small. A separate analysis demonstrated that when a Gordon teacher *did* have assistance, his communication volume expanded in the same fashion as found in Efstutt.

FIGURE 7

INCREASE IN VOLUME OF TEACHER COMMUNICATION IN EFSTUTT SCHOOL DUE TO THE PRESENCE OF AIDES



acter of teacher communication in the school. Seemingly, the consequence was not to replace the customary communication with colleagues but rather to add to it—and to add a dimension normally missing, or infrequently exercised, in customary colleague communication. The results corroborate the conclusion of the preceding section regarding the effect of aides on task interdependence in the instructional work system.

General Observations

The communication measures just reported, as well as other evidence presented in this chapter, demonstrate that one structural change of the DS project, the introduction of teacher assistants into Efstutt classrooms, had a pronounced effect on the character of work relationships in the elementary school. Apart from this, however, one could hardly say that DS had radically changed staff relationships in the organization and conduct of instruction, at least not by the end of the first year of implementation.

Other than with respect to paraprofessionals, the similarities in work relationships between the Efstutt and Gordon schools were more impressive than the differences. The basic pattern of the division of instructional labor, in which each classroom teacher was responsible for the gamut of key curriculum areas—math, science, language arts, and social studies—still held true in Efstutt school, and the special subject teacher (of music) who was added to augment the full-time music teacher fit into the task system of the school just as other subject teachers did—teaching the students scheduled to him independently of grade-level teachers.

The support specialists without regularly scheduled teaching assignments, such as the counselor, the IMC director, and the reading specialist, had not developed roles sufficiently vital to the instructional program to lead teachers to identify them as persons with whom they had to work collaboratively. The same was true for the high-level specialist position, the instructional coordinator. Insofar as the central work of classroom instruction was concerned, the occupant of this position was not regarded by teachers as an indispensible collaborator.

Evidence suggests that the cross-graded instructional teams to which Efstutt teachers had been assigned had not replaced the classroom as the functioning instructional unit. While there was indication of task interdependence among a few Efstutt teachers, it was exclusively between teachers at the same grade level. This is not to say that the instructional teams were without function in the school: outside data from the Efstutt case study indicate that these teams played a role in the administrative structure of the school, much as departments do in secondary schools. But as teaching units, they had not jelled by the spring of the year. Nor was there evidence that membership on the so-called curriculum teams had had an impact on the instructional process.

Patterns of teacher communication with fellow teachers and with the building principal were not markedly different between the Efstutt and Gordon schools. The differences that did appear could be interpreted, in part, as reflecting the unusual problems associated with involvement in a school-wide innovation project but certainly not the consummation of relationships anticipated in a DS plan.

Yet the data regarding staff interdependencies and communication leave no doubt that employment of paraprofessionals fundamentally affected the teacher's relationships. Each teacher had his own assistant available in the classroom for some portion of the day with whom he was obliged to develop some kind of work arrangement. That new and important relationships did arise is hardly surprising by virtue of their inevitability.* The implications of the new relationships, however, must not be overlooked because of their obviousness.

For one thing, the Efstutt teacher no longer was alone in his role. Perhaps for the first time, he had another adult on whom he depended to help him cope with the manifold problems of the classroom. While he and his fellow teachers worked in similar worlds, he and his aide shared the same world for a major fraction of the

* How they worked out in practice is a story that must be told with other sources of evidence. See especially Robert B. Everhart, The Career of the Paraprofessional in Four Differentially Staffed Schools, Doctoral dissertation, University of Oregon, 1972, and Jones, Elementary School Under Planned Change.

day, enabling the two to talk about the most immediate, the most intimate, and even the most trivial aspects of work in a way that he could never do with his colleagues. His social isolation in some degree was dispelled.

Another implication concerns added demands on teacher time. The very presence of a helper requires that the two talk and plan together, especially in the period before a smoothly functioning routine has evolved, and time for such communication is not always easy to find, given the teacher's normally crowded day and the aide's shortened work schedule. Some paraprofessionals, less familiar with classrooms or less accommodating to the teacher, draw more heavily on the teacher's time than others, of course, and some teachers find it more difficult than others to work out a new classroom routine that incorporates another adult and that necessarily entails the diversion of time to managerial "overhead." But despite these variations, until the aides' contributions to the work systems of their respective classrooms becomes regularized, the time demands on teachers will be unusually heavy. And such demands will compete with those associated with other facets of the implementation of innovation.

CHAPTER V

Power, Influence, and Instructional Decision-Making

One of the prominent arguments for differentiated staffing concerns its potential for endowing professionals with the power to make a wide range of instruction-related decisions ordinarily denied them. The key element in the DS scheme is the instructional team, which represents an entirely new decision-making structure in the school. Acting in a setting relatively unconstrained by system-wide policies, curriculum guides, or prescribed instructional procedures, members of the respective teams are expected to bring their professional judgment to bear on decisions regarding materials, methods, schedules, groupings, and the like to achieve an educational program both flexible in design and uniquely suited to each team's students. Educational plans under DS would be determined by the groups closest to the instructional scene, the parties directly responsible for carrying them out.

Decisions of other varieties, too, that bear closely on the teaching process but that normally are reserved to administrative discretion (budgetary allocations, staff employment, assignment, evaluation

and so on) become of vital interest to the teams, and professionals participate actively in resolving these issues as well. Thus, DS entails a major redistribution of power in the school organization, a redistribution in which the collegial group of professionals emerges as a pivotal agency of control over the operating educational program.

These implications of DS urged CASEA researchers to develop and apply measures of the distribution of power and control in the schools under investigation. This chapter will report the several approaches we used. The first section describes our efforts to measure constraints on teacher decisions about intimate features of classroom teaching—decisions that typically lie within the province of individual teachers in the conventional school but that would be subject to group determination under the teaming arrangements of DS.

In the next section we will report on teacher evaluation procedures in the Efstutt and Gordon schools, at least as we determined them from responses to a series of questions on the teacher questionnaire. Staff evaluation procedures assume importance by virtue of the emphasis in the DS literature on lodging greater supervisory responsibility in the collegial group and minimizing the supervisory role (with the power it implies) of the administration hierarchy.

The last section relates to a different facet of organizational power—the distributions of school-wide influence and of esteem (or personal regard) among members of the school's staff. While neither influence nor esteem is considered a criterion, or defining attribute, of DS, there are compelling reasons to expect influence and esteem structures to change as a consequence of adopting a DS plan.

The Locus of Instructional Decisions

There is, of course, a wide variety of issues for decisions in public schools, but the first interest of the CASEA researchers studying the DS implementation was in decisions at the operating level of the school's work system, *i.e.*, the conduct of classroom instruction. Empirical studies that have compared either the Multiunit school or open-space schools with traditional elementary schools leave little

doubt that abandonment of the self-contained classroom organization significantly alters the manner in which these decisions are made.* The research also points to the enormous complexity of the decision process in schools of any type and to the fact that descriptive problems cannot be reduced simply to the "amount" of power exercised by teachers. At stake, rather, are changes in a number of features simultaneously--in the locus of particular decisions (individual teachers *vs.* a teaching team, for example), in the nature of the constraints on choice (whether or not a system-wide policy exists to which a decision must conform, for example), and in the roles of the various parties involved in the decisions. Moreover, the pattern of change is different depending upon the substantive decision issues at hand.

Pellegrin's contrast between the instructional decision process in Multiunit and conventional elementary schools indicates the type of change one would expect in DS schools, once instructional teams become operating realities. We quote his report in full, beginning with his characterization of instructional decisions in traditional, or "control," schools.

> In most instances, the individual teacher makes the decisions, either alone, in consultation with the principal, or within certain limits prescribed and/or enforced by him. The teacher and the principal operate within certain limits or guidelines set by the district curriculum committee and by central office subject matter specialists. Thus, both primary decision-makers, the teacher and the principal, have limits set on their discretionary authority. On the other hand, few teachers see themselves as involved in group decision-making of any kind. Our data give us a view of the school as being composed of separate, relatively isolated classrooms, with the activities of each classroom being determined primarily by the teacher, who is monitored to a greater or lesser extent by the

* Roland J. Pellegrin, "Professional Satisfaction and Decision Making in the Multiunit School," Reprints and Occasional Papers, Center for the Advanced Study of Educational Administration, University of Oregon, Eugene, Oregon, November 1969; John Meyer and Elizabeth Cohen, *The Impact of the Open-Space School upon Teacher Influence and Autonomy: The Effects of an Organizational Innovation*, Technical Report No. 21, Stanford Center for Research and Development in Teaching, Stanford University, Stanford, California, 1971.

> principal. For the school as a whole, the principal is the central authority figure, for he is the only person whose basic activities extend beyond the borders of a single classroom.
>
> In the Multiunit School there are some remnants of the pattern we have just described. The key fact is, however, that the decision-making process has been fundamentally altered. The evidence is overwhelming that decision-making authority has been shifted to the unit [team] faculty. [When teachers are asked to identify other persons involved in the decisions,] the persons most often mentioned are the other members of one's own unit. Furthermore, the characteristic response is to name all the faculty members of the unit. The principal figures much less centrally as a decision-maker, advisor, or limit-setter. When he is nominated, he is usually not seen as an independent authority figure, but as one of a group of persons involved in making decisions. The unit leader, similarly, is not viewed as a separate decision-making authority. Rather, he is nominated along with other members of the unit as part of the group of decision-makers. The district curriculum committee and central office specialists are nominated much less frequently in the Multiunit Schools than in the controls. In general, then, the evidence is that the unit faculty has emerged as dominant in the decision-making process.*

The situation Pellegrin describes obviously cannot be captured by the familiar "centralization *vs.* decentralization" distinction. It is both. The highly decentralized system of the conventional school in which each teacher has considerable latitude in conducting affairs within his own classroom is replaced, in the Multiunit school, by the centralization of decisions in each of the several instructional units. At the same time, however, the impersonal and centrally imposed constraints under which the individual teacher must operate in the conventional school, and over which he has little effective control by virtue of their remoteness, are reduced in number in the Multiunit school or brought under the jurisdiction of the instructional unit, of which the teacher is a member. Nor is the situation simply a matter of the relative amount of decision-making power of professionals *vis-à-vis* administrators or other parties, as we noted before. As individuals, professionals lose power; as a group, they

* Pellegrin, "Professional Satisfaction," pp. 11-12.

gain power. Interestingly, the empirical research shows a striking gain in the *psychological* feelings of power of individual teachers when the self-contained classroom is abandoned, a finding that is most clearly demonstrated by Meyer and Cohen.*

Measures. In an effort to detect the complex pattern of change anticipated in DS schools, the research questionnaire incorporated a series of questions regarding instructional decisions.† The series led off with a request of teachers to "describe how much freedom of choice you have and the types of limitation that exist on aspects of *your own* day-to-day teaching." Eight aspects were listed:

a. Selecting and using supplementary instructional materials
b. The subject content to emphasize with students
c. The timing and pacing of your instruction
d. Your modes and techniques of teaching
e. Your means of assessing students' performance
f. The procedure for grouping students for teaching
g. Your style of relating to students
h. Methods of establishing and maintaining classroom control

These are matters on which classroom teachers in the conventional school normally have substantial discretionary power.

With regard to each, teachers were asked to check whether they believed they had "considerable freedom," "moderate freedom," or "little freedom" in their own daily teaching and were further asked to indicate which ones of a set of alternatives they regarded as "important limitations on your freedom." They could check as many of the following as they wished:

a. Requirements, guidelines, or standard practices of the district
b. Advice of central office consultants, supervisors
c. Advice of specialists or consultants in the building
d. Advice of principal, department or grade chairman
e. Decisions of formal committee in the building
f. Decisions of colleagues with whom you work closely
g. Limits of time, space, resources, or the schedule

*Meyer and Cohen, *Impact of the Open-Space School*, Chapter 2.

† The research staff based the questions primarily on those used in CASEA's Attributes Project and the set reported by Meyer and Cohen, *Impact of the Open-Space School*. For further discussion of the measure development and some additional analyses, see Appendix B.

Under a teaming arrangement, alternative *f* and possibly *e* should emerge as prominent limitations on the discretionary judgment of individual teachers, while alternatives *a*, *b*, *c*, and *d* should be regarded as considerably less restrictive.

Results. Upon tabulating responses to the questions, it became apparent that the large majority of teachers in both Efstutt and Gordon schools believed they had "considerable" freedom on all eight aspects of teaching, although the size of the majority was less impressive on certain aspects than on others (see Figure 8). Thus, with respect to decisions about supplementary classroom materials, techniques of teaching, and styles of relating to students, all but two or three teachers in both schools combined indicated they were free to use their own discretion. Somewhat larger numbers indicated "moderate" restrictions on freedom of choice with respect to subject-matter emphasis and assessment of student performance—matters which tended to be governed by general district policies. In Efstutt school, about half of the teachers said they had "moderate" or "little" freedom in pacing their instruction or in grouping students for instruction, an indication of unusual restraint on teacher autonomy in comparison with the Gordon school.

Most teachers, regardless of the freedom they said they had, checked one or two of the alternatives specifying the most important kinds of limitations on their latitude of choice. (Higher proportions of Efstutt than Gordon teachers checked the limitations.) In both schools, the most popular alternative across the eight decision areas was the last: "limits of time, space, resources, or the schedule."

Generally speaking, to the degree that teachers felt hemmed in at all with regard to the core features of their work, they attributed it to impersonal circumstances of the teaching situation.

Inspection of the data in Table 11, which shows in percentage terms how teachers in the two schools distributed their check-marks over the several kinds of limitation, reveals some modest variations from one decision area to another and some differences between the schools. For the most part, the percentage differences are small and probably more indicative of unique features of the schools and their particular governance patterns in the eight areas than of trends

FIGURE 8

PERCENTAGE OF TEACHERS REPORTING "CONSIDERABLE FREEDOM" IN INSTRUCTIONAL DECISIONS

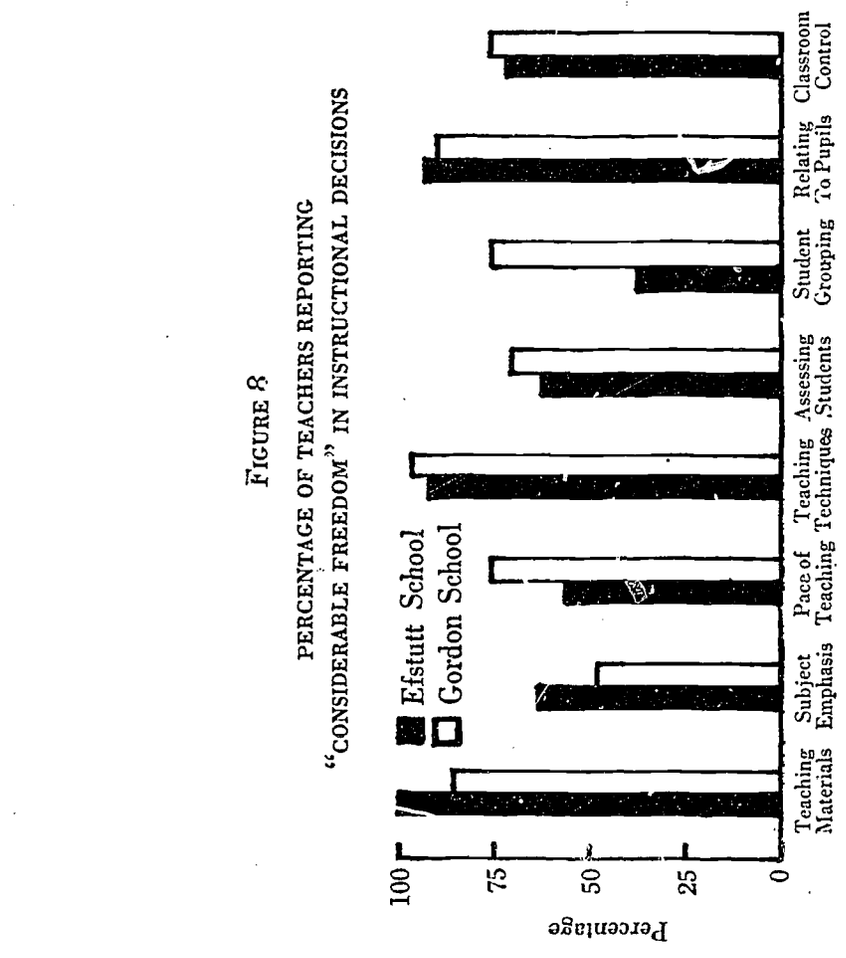


TABLE 11

TYPES OF CONSTRAINT ON EIGHT ASPECTS OF INSTRUCTION, AS REPORTED BY EFSTUTT AND GORDON TEACHERS

(Percentage Distribution)

Type of Constraint	*Aspect of Teaching*															
	Teaching Materials		*Subject Emphasis*		*Pace of Teaching*		*Teaching Technique*		*Assessing Students*		*Student Grouping*		*Relating to Pupils*		*Classroom Control*	
	Efst	*Gord*	*Efst*	*Gord*	*Efst*	*Gord*	*Efst*	*Gord*	*Efst*	*Gord*	*Efst*	*Gord*	*Efst*	*Gord*	*Efst*	*Gord*
District requirements, guidelines, practices	9	13	23	30	17	15	12	25	23	25	4	7	17	12	18	12
Advice of consultants (district and bldg.)	4	8	10	12	4	11	4	8	4	7	—	4	—	—	4	8
Advice of principal, grade chairman	4	13	—	12	4	7	4	13	15	8	—	7	5	25	25	28
Decisions of committee in building	—	—	—	2	—	—	—	—	8	18	12	4	—	—	—	4
Decisions of close colleagues	17	13	23	9	21	22	24	4	15	14	32	22	17	19	21	24
Limits of time, space, resources, schedule	66	53	44	35	54	45	56	50	35	18	52	56	61	44	32	24
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
(Number checked)	(23)	(30)	(30)	(43)	(28)	(27)	(25)	(24)	(26)	(28)	(25)	(27)	(18)	(16)	(28)	(25)

associated with the implementation of DS. It is interesting to observe, for example, the greater activity of the Gordon principal than of the Efstutt principal in giving advice concerning modes of relating to students, subject content to emphasize, and so on, a difference that may simply be a function of the larger number of first-year teachers in Gordon.

Of the two aspects of teaching in which Efstutt teachers reported less freedom than their Gordon counterparts, only on student grouping was there strong indication that close colleagues or a formal committee of colleagues in the building was the responsible factor. Insofar as the timing and pacing of instruction is concerned, the problem apparently lay in the impersonal restraints of time, space, and schedules.

If one studies the data closely, he can find that Efstutt teachers are more inclined to identify decisions of their close colleagues as limiting conditions than Gordon teachers in several of the areas—most notably with respect to the choice of teaching techniques and subject emphasis—and that they are less likely to identify centrally imposed constraints (alternatives *a*, *b*, *c*, and *d*) in five areas. While these trends are consistent with a change toward the investment of greater control in the collegial group, they are too small and irregular to be persuasive. They hardly describe a major redistribution of power in the school organization.

More revealing, possibly, is the greater consistency with which Efstutt teachers mentioned the "limits of time, space, resources, or the schedule" as an important restriction on their freedom. They selected it more often than Gordon teachers in seven of the eight decision areas. While the differences are again small, their high consistency suggests that Efstutt teachers were somehow hampered in their instructional program—perhaps by the disruptive events of the DS implementation.

In sum, given the evidence assembled in earlier chapters regarding the failure of Efstutt's formal instructional teams to emerge during the first year as *bona fide* teaching teams, it is not surprising to discover that the decision process with respect to classroom instruction did not differ substantially between the DS school and the

conventional school. True, in a few respects Efstutt teachers more often found their autonomy constrained by their colleagues, and they more often noted the hampering effect of impersonal features of the teaching situation, but the outstanding fact is that teachers in both schools believed that they had extensive latitude to exercise their own professional discretion in carrying out their work.

Staff Evaluation

The evaluation of teachers with regard to classroom performance in elementary schools traditionally has been the responsibility of the principal, who often is expected to follow formal procedures established as a policy by the larger school system. The rationale for DS, while not directly challenging the principal's prerogative, generally calls for increased participation of the teacher's peers in the evaluation process. In the two DS secondary schools investigated by the CASEA staff, systematic collegial evaluation was incorporated in the formal plans for DS implementation. In the Efstutt school, however, no such formal arrangements were advanced. Nevertheless, the research staff believed it would be of value to describe the formal evaluation procedures of the elementary schools.

A series of questions was included in the teacher questionnaire regarding the "who, how and why's" of teacher evaluation. The first question was the most important for detecting differences between a conventional school and one operating under a DS plan. It asked teachers to indicate who "supervised and/or evaluated" their instructional activities—the principal or other administrators, an instructional supervisor, other individual teachers, a group of other teachers ("peer evaluation"), or no one. Teachers could designate more than one evalnator, and a few in Efstutt and Gordon schools did.

The results shown in the first part of Table 12 (which is based on responses of both grade-level and subject-area teachers) demonstrate the key role of the principal in formal evaluation in both schools and the absence of formal peer evaluation. Curiously, four Gordon teachers (all with long tenure in the school) mentioned the implication of "other individual teachers" in the evaluation process in addi-

TABLE 12

FORMAL EVALUATION:
WHO EVALUATES, HOW, AND WHY,
AS REPORTED BY EFSTUTT AND GORDON TEACHERS

Question and Alternatives	NUMBER OF TIMES CHECKED *Efstutt (N=15)*	*Gordon (N=21)*
1. My instructional activities are supervised and/or evaluated by:		
Other individual teachers.	–	4
A group of teachers ("peer evaluation").	–	–
The principal or other administrators.	15	21
Instructional supervisor.	1	1
No one.	1	–
2. My instructional activities are supervised and/or evaluated by:		
Systematic procedures involving direct evidence of my instructional competency, including observation of my teaching.	7	10
Indirect procedures (Examples: assessment of pupil achievement records, assessment of maintenance of approved classroom "appearance," assessment of discipline, parental complaints).	7	10
Informal discussion and advice from others.	4	6
No definite procedure for supervision and/or evaluation.	3	5
3. My instructional activities are supervised and/or evaluated in order to:		
Assess my performance for the purpose of tenure and salary increases.	11	14
Assess the quality of my instruction.	9	16
Assess my adherence to policies and procedures.	–	4
Assess my control over pupils.	2	5
Assess my adaptability to innovation.	4	1

tion to the principal. There was no similar occurrence in Efstutt, and its absence remains unexplained in our data.

Two further questions concerned the nature of the procedures used in evaluation and the purpose of evaluation, insofar as the teachers perceived it. Again, teachers were permitted to check more than one alternative. The alternatives are shown along with the tally of the results for Efstutt and Gordon staff members in the second and third parts of Table 12. Teachers in both schools acknowledged that both direct and indirect evaluation procedures were used to evaluate them; only a few in either school said there was no definite procedure in use. Also, teachers in the two schools believed the main purposes of evaluation were to assess the quality of their instruction and to determine tenure and salary increases, a belief that was in keeping with the formal policy of the school district. A few Efstutt teachers believed their adaptability to innovation was under scrutiny (apparently referring to the DS implementation project), and a few Gordon teachers thought they were assessed with respect to their adherence to school policies, but generally speaking the differences between the two schools in teacher perceptions of the purposes of evaluation were not great.

Finally, two questions were posed regarding the frequency and closeness of the formal evaluations the teachers received. Table 13 displays the wording of the questions, the alternatives the teachers could check (just one alternative was permitted in these questions), and the tabulations of responses.

In general, Efstutt and Gordon teachers described themselves as being evaluated "fairly infrequently" and "fairly loosely," with no appreciable differences in replies between the two staffs. A further examination of responses (the data for which we do not show) determined that the newer teachers—*i.e.*, those who had been in the school less than four years—were somewhat more frequently and closely supervised than the older teachers, as one might well expect; this was truer in the Gordon school than in Efstutt. In neither school were the differences pronounced, and most new teachers also described their supervision as fairly infrequent, fairly loose.

To summarize, the formal evaluation procedures were standard

TABLE 13

FORMAL EVALUATION:
FREQUENCY AND CLOSENESS,
AS REPORTED BY EFSTUTT AND GORDON TEACHERS

Questions and Alternatives	PERCENT OF TEACHERS	
	Efstutt (N=15)	*Gordon (N=21)*
1. In general, my instructional activities are supervised and/or evaluated by others:		
Very often.	–	–
Fairly often.	7	14
Fairly infrequently.	60	57
Rarely.	26	24
Never.	7	5
Total	100%	100%
2. In general, my instructional activities are supervised and/or evaluated:		
Very closely.	–	–
Fairly closely.	14	9
Fairly loosely.	53	72
Very loosely.	33	10
Not at all.	–	–
Total	100%	100%

in the two schools and indicated no trend toward collegial participation that might have been associated with Efstutt's DS implementation. Principals were the supervising agents, they observed classroom teaching and used other, indirect evidence of performance, their supervision was neither close nor frequent, and the teachers regarded its purposes as assessing the quality of instruction and determining tenure decisions and salary increases.

Informal peer evaluation. While formal evaluation procedures may not be especially sensitive to changes toward a DS plan, the frequency of informal appraisals among colleagues of one another's teaching performance should be more so. As instruction moves out of

the privacy of the self-contained classroom and comes to be conducted in an interactive team setting, the performance of teachers becomes visible to other professionals, and the opportunity arises for them to react to, offer help and advice on, and informally judge the work of their peers. That this, in fact, occurs is attested to by Meyer and Cohen, who found in their study of open- and closed-space schools that the incidence of collegial evaluation was considerably higher in the open settings.* They also found, incidentally, that formal evaluation by the principals did not differ much between the open and closed settings, supporting the view that informal peer evaluation is the more sensitive to changes in instructional organization.

To test for differences in peer evaluation, a question similar to one used in the Meyer and Cohen study was included in the teacher questionnaire. It asked:

> How often do you receive reactions or advice from other teachers about your personal . . .
>
> Curriculum planning
> Grading practices
> Teaching of specific lessons or classes
> Student control and discipline practices
> Manner of working with individual students

Teachers could check the frequency with which they received reactions in these realms in one of five categories, running from "Very often" to "Rarely" and "Never."†

In Table 14 we have tabulated the percentages of staff members who said that other teachers *rarely or never* give them reactions and advice. The figures show that well over half of the Efstutt faculty was hardly ever on the receiving end of collegial appraisal of work performance in any of the realms except student discipline and control. The percentages tend to be somewhat lower in the Gordon school, suggesting that informal peer evaluation was more common there. Since the difference could have been due to the greater num-

* Meyer and Cohen, *Impact of the Open-Space School*, pp. 31-34.

† The alternatives were identical to those in the questions on staff communication. See Chapter IV.

ber of beginning teachers in the Gordon school who might be expected to seek out advice, further examinations of the responses were made to check such a possibility. The examination revealed a slight tendency for the newer teachers to be the recipients of other teachers' advice in both schools, but this was neither consistent in all realms nor sufficiently pronounced to account for the differences between the schools.

These findings are in keeping with the data provided in Chapter IV regarding the paucity of task-related communication among teachers in the two schools. They demonstrate that informal evaluation of work performance was not an especially common occurrence in either school and clearly not more so in the Efstutt school implementing a DS plan.

TABLE 14

PERCENTAGE OF TEACHERS RARELY OR NEVER RECEIVING INFORMAL EVALUATION IN FIVE INSTRUCTIONAL REALMS EFSTUTT AND GORDON SCHOOLS

Realm of Instruction	*Efstutt (N=15)*	*Gordon (N=21)*
General curriculum plans for the class	67%	72%
Grading practices	100%	72%
Teaching of specific lessons or classes	67%	50%
Student control and discipline practices	47%	48%
Manner of working with individual students	80%	52%

INFLUENCE AND ESTEEM STRUCTURES

Professional teachers are expected to play a far more powerful role in the school, according to the visions held out for DS, than they normally do in schools following conventional patterns of staff assignment. Not only should they exercise greater control (as groups) over the instructional process in classrooms but their voices are expected to be amplified with regard to the larger of the school as well. One of the sharpest differences revealed in previous studies comparing Multiunit and "control" schools, or open-space and closed-space schools, concerns the amount of influ-

ence rank-and-file teachers believed they had, individually or as a totality, over school-wide operations and policies; teachers in Multiunit and open-space schools consistently felt their influence to be greater than their counterparts in conventional schools.*

In the Multiunit schools, feelings of influence may have been enhanced by the so-called Instructional Improvements Committees —formal cabinets consisting primarily of the principal and teachers who were unit leaders—that afforded teachers an indirect opportunity to participate in the consideration of school-wide issues. Other or similar forums appear to have been available in the open-space schools, in view of the large volume of teacher interaction in formal group meetings reported by the investigators. In any case, as teachers begin to confront issues of moment beyond the classroom, and especially as they see their fellow staff members addressing themselves to the same school-wide issues, new grounds for mutual evaluation emerge that otherwise are absent in school staffs and a new and more diverse distribution of esteem should appear.

The distribution of influence. Influence was measured by a nomination question in the questionnaire that asked teachers to list the persons whose support for an idea was crucial in getting it approved. Following is the question wording:

> If you wanted to receive approval from the faculty of your school for an idea or plan you were proposing, it would sometimes be helpful to enlist the support of certain other individuals. Please list below, by name and position, the individuals *whose support* for your idea or plan would be most crucial in getting it approved.

Space was allowed for about five names, although teachers could list as many persons as they wished; an average of three nominations was made by Efstutt teachers, two by Gordon teachers. To analyze the responses, we simply tallied the nominations received by anyone on the staff, as given by all the teachers (grade level and subject area) in the school. The distribution is displayed in Figure 9.

* Roland J. Pellegrin, "Some Organizational Characteristics of Multiunit Schools," Technical Report No. 7, Center for the Advanced Study of Educational Administration, University of Oregon, Eugene, Oregon, 1970; Meyer and Cohen, *Impact of the Open-Space School*, pp. 44-49.

The most obvious feature on the influence structure of both Efstutt and Gordon schools, shown in Figure 9, is its domination by the principal. While a few classroom teachers received a number of nominations, at best they received but one-third the number given the principals. And no one outside the school faculty was nominated. Clearly, the principal was "the man to see" in both schools.

The principal's dominance appears to have been greater in Gordon school than in Efstutt. Only two other persons of the 24 members of Gordon's total faculty (counting the principal and two support specialists) received more than two nominations; well over half received none at all. In Efstutt, on the other hand, the nominations were more widely distributed across the staff. (This is due, in part, to the fact that Efstutt teachers *gave* more nominations than Gordon teachers.) Five persons other than the principal received more than two nominations, and well under half of the total faculty (eight of 21) received none.

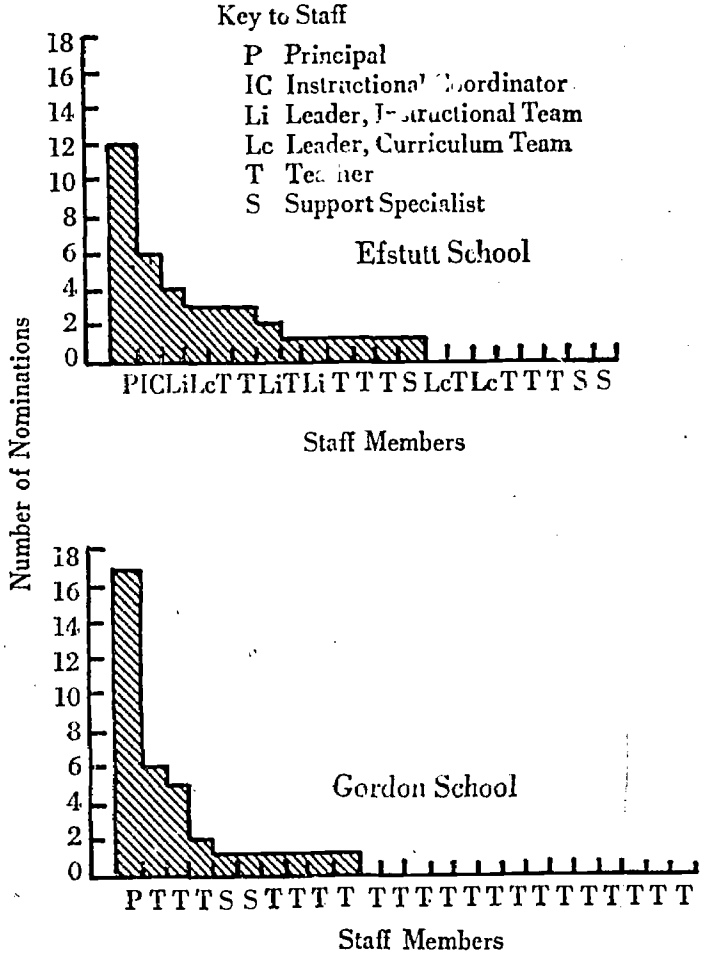
Besides the greater dispersion of influence in Efstutt, two details of Efstutt's influence structure are worth noting. With one exception, leaders of the instructional teams did *not* stand out as key persons in the school. This contrasts with Pellegrin's findings in his study of the Multiunit schools.* The exception was the fifth-grade teacher (male) who was the leader of both an instructional team and a curriculum team—the only person in the school to hold both of the appointive positions.

Another detail concerns the nominations received by the instructional coordinator in Efstutt, the second highest number in the school. This position was a new one in the school, a high-level position created under the DS plan whose incumbent was to work with the curriculum and instructional teams. In certain respects, the position was like that of a vice-principal. It is apparent that the creation of this position, filled by a person recruited from outside the school system, had quickly altered Efstutt's authority structure. This accords with Pellegrin's generalization from data of the Multiunit school study. He observed that when new positions are created in a school's organizational structure, particularly when the incum-

* Pellegrin, "Professional Satisfaction," p. 13.

FIGURE 9

INFLUENCE DISTRIBUTIONS



bents are responsible for activities extending beyond the borders of individual classrooms, influence tends to become decentralized and to "flow" to the new position incumbents. A "second echelon" of influence is thereby created.* In Efstutt's case, however, influence tended to be attached to instructional coordinator position rather than to the team leader positions.

The distribution of esteem. A similar procedure was used to measure teachers' evaluations of the contributions of other staff members to the resolution of school-wide issues. The questionnaire item read:

> In a school faculty, some individuals usually make suggestions for the solution of problems that are more useful and reasonable (and are more highly regarded) than are the suggestions made by other persons. Please list below, by name and position, those individuals in your school *whose suggestions* you would expect to be most useful in solving school problems.

Nominations given by teachers were analyzed as before. In this question, teachers in the two schools made about the same number of nominations—about three, on the average. The order in which nominated staff members are listed in Figure 10 is the same as that in the preceding figure, facilitating the comparison between influence and esteem nominations.

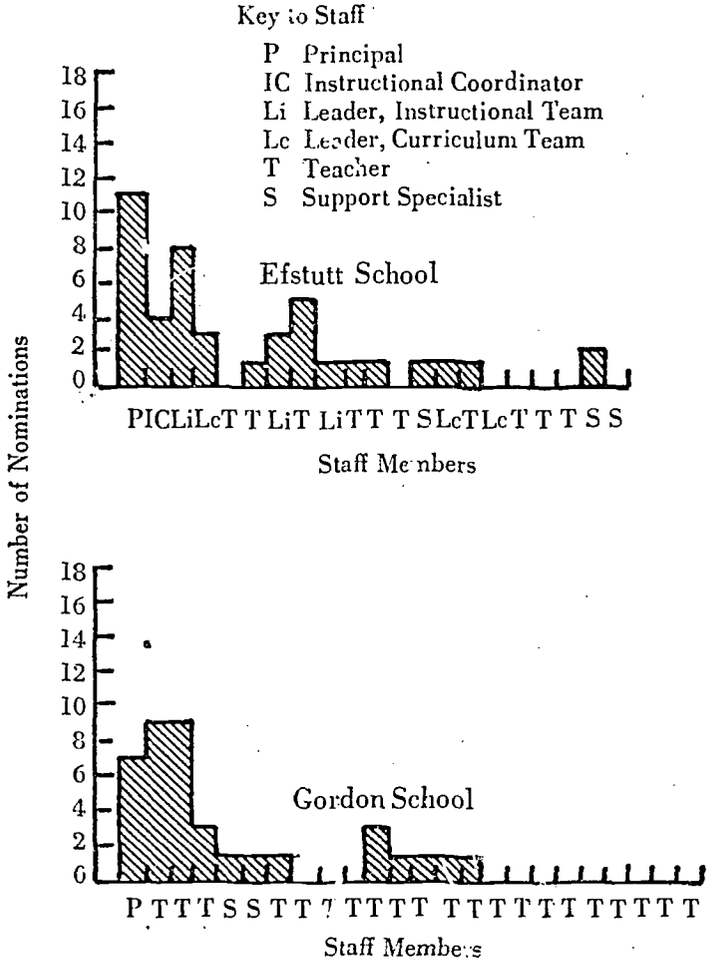
Generally speaking, the distributions indicate considerable overlap in staff members' influence and esteem, but at the same time some important disparities are in evidence. Thus, in the Gordon School two classroom teachers, heavily overshadowed by the principal in terms of influence, now overshadowed him in esteem, and a third teacher who had not been nominated as influential by anyone received three esteem nominations, the fourth highest in the school.

Where Gordon's principal declined in the esteem standings, Efstutt's principal retained first place. The Efstutt teacher who was the leader of both an instructional and a curriculum team was second, followed by a teacher virtually unmentioned in the influence ratings. Efstutt's new instructional coordinator was fourth. It is

* Pellegrin, "Professional Satisfaction."

FIGURE 7.0

ESTEEM DISTRIBUTIONS



evident in both schools that faculty standings in influence and esteem were only modestly related.

Although Figure 10 does not display the school comparisons well, one can determine that esteem nominations were more widely dispersed across the Efstutt faculty than across the Gordon staff. A higher proportion of the Efstutt than the Gordon faculty received more than two esteem nominations (7/21 *vs.* 5/24), and a lower proportion received none (7/21 *vs.* 12/24).

There is a suggestion in the data that esteem was organized in the Gordon school in part by teaching experience. The three most esteemed teachers had 12, 14, and 20 years of experience. That other attributes besides experience were involved in determining regard is indicated by the fact that several other teachers had as much, or more, teaching experience as these three but did not receive esteem nominations. Thus, experience in Gordon school was a necessary but not sufficient condition for being highly regarded. No similar observation can be made about the organization of esteem in Efstutt; lengthy teaching experience was not even a necessary condition there.

There can be little doubt that many factors determine staff members' evaluations of one another's contributions to school-wide issues. Simple visibility in the formal and informal problem-solving arenas of the school is, perhaps, *the* necessary condition. Before a staff member's "suggestions for solving school problems" can be judged by his colleagues, he must first have the opportunity to express them in reasonably conspicuous settings. These opportunities do not arise frequently for classroom teachers in elementary schools unless effective forums for discussion exist and urgent problems are at hand.

Findings concerning teacher-teacher communication reported in Chapter IV indicated that Efstutt teachers interacted with one another half again as frequently about gripes and concerns of work as Gordon teachers, and we presumed then that the greater volume of communication was attributable to the turmoil of implementing change. Certainly, issues of considerable moment to teachers, over and beyond the immediate classroom, confronted the Efstutt staff

during this DS project year, and it would appear that they had the opportunity, and exercised it, to talk to one another about school-wide problems. The visibility thus engendered could account for the greater dispersion of esteem found in the Efstutt faculty than in Gordon's. If this line of reasoning were true, however, it suggests that the dispersion of esteem (and perhaps influence) was a consequence of the change process itself, not necessarily an attribute inherent to an operating DS plan.

General Observations

This chapter has concentrated on power and authority in school organization—matters that are subject to profound alteration in schools with operating DS programs. If the vision of DS were met in a school, control over a range of vital educational issues would be lodged firmly in the hands of professional teachers operating together in work groups. Decisions concerning the immediate instructional task would pass from individual teachers to the collegial group, and the constraints normally imposed by agents of the central administrative system on these decisions would be relaxed or removed altogether. Control of individual task performance would become a function of one's peers in the work group, supplementing if not supplanting the evaluative procedures of school managers.* And, with respect to school-wide issues bearing on the educational program, teachers acting individually or through group representatives would participate more vigorously, and with greater force, in helping to resolve them. There are other implications of DS, too, for a shift of power to professional groups (such as their greater control over appointment of colleagues), but these were not matters which the CASEA researchers sought to measure through the teacher questionnaires.

* Staff "accountability," however, is a countervailing theme strongly emphasized in the DS literature. Tasks are to be broken down into smaller and "more manageable" components, job descriptions are to be prepared in terms of detailed performance objectives, and managers will be enabled as never before to evaluate staff performance against specified standards. How collegial evaluation, in terms of professional norms, fits into the picture is not clear in the literature.

That these anticipations were not met in any important degree in Efstutt school during the first year of implementation is the conclusion offered by the data of the chapter. At least we are able to say that by late spring of 1971, power and authority in Efstutt school looked very similar, in most of these respects, to the conventional school, Gordon, not engaged in implementing a DS plan. Instructional decisions were still in the hands of individual classroom teachers acting more or less autonomously within the framework of centrally imposed and administratively enforced constraints. The schools were alike in that teacher evaluation was still the province of the principal, and collegial evaluation, either of a formal or informal nature, was not in evidence. The principal continued to dominate the system of influence with respect to school-wide issues, and there was no clear indication that leaders of instructional units were emerging as a "second echelon" of influence within the school.

In certain respects, however, the situation in Efstutt had changed. Through the creation of a key post in the school's authority structure—that of instructional coordinator—a new element in the system of influence was introduced. Half of the teaching faculty regarded the newly recruited incumbent as influential in school affairs, standing second only to the principal, and this attribution seems to have been more a function of the formal position the person inhabited than of the esteem the person had earned in the course of the year.

Too, both influence and esteem (the personal regard in which staff members were held for their contributions to school-wide issues) were distributed more widely across the staff in Efstutt school than in Gordon school. Leaders of the formal teams, instructional or curriculum, however, did not appear as uniquely esteemed teachers, just as they did not emerge as influentials. Their situation recalls the evidence reported in Chapter II demonstrating that, insofar as professional and employee role orientations are concerned, the persons appointed to the leadership positions were indistinguishable from the rank-and-file classroom teachers. Nevertheless, more Efstutt teachers than Gordon teachers were influential on school-wide issues, fewer were regarded as non-influential; more were held in

high regard for their contributions, fewer were ignored in the esteem nominations.

Why the dispersions were greater is open to alternative interpretations. It may have been due to Efstutt's smaller and more homogeneous staff (in terms of the number of years they had been together in the school). Toward the end of the chapter, we observed that it could have been the result of the implementation process itself—an upshot of the fact that the DS project created disruptions in routine, changed conditions and common problems which teachers talked and worked together to attempt to resolve. Evidence p ovided in the present chapter adds an increment to the observations regarding the disruptive effects of change noted in earlier chapters: here we have found that the overriding constraint reported by teachers on their teaching was that of time, space, and the schedule—reported more consistently by Efstutt teachers than by their counterparts in Gordon. Conceivably, the events and problems introduced by the DS project competed strongly against the responsibilities of classroom teaching for the teachers' time and attention. In working through their common problems and those of the project, teachers may have found new grounds for evaluating one another and for broadening the base of esteem. While this is a plausible interpretation of the greater dispersion of esteem in Efstutt, possibly extending to cover the dispersion of influence as well, other interpretations remain. Our questionnaire data provide no way unequivocally to choose among them.

CHAPTER VI

Concluding Observations

This report has served two purposes simultaneously, one methodological and one substantive.

On the methodological side, we wished to make available to the educational research and development community the results of our developmental work on measures of the behavioral attributes of the school's work system and instructional organization. The questionnaire instrument, itself, yields little indication of the specific measures it incorporates, the rationale behind the measures, or the means by which responses can be analyzed. We hope that by making the measures accessible and illustrating their application, the instrument, or parts of it, will be useful to other investigators and that the measurement approach will be the subject of consideration and further development.

In pursuit of the methodological purpose, we have described the measures in the context of a particular study. We have compared results of the measures in two elementary schools, one of which had been in the process of implementing a differentiated staffing pro-

gram for most of a school year and the other of which, substantially similar to the first, served as a "control." Thus, the second purpose of the report has been to draw substantive conclusions regarding the extent to which the "experimental" school (which we have called Efstutt) had approached the objectives of a DS program by the end of the year.

One academic year may seem to be an unusually short period of time in which to expect major alterations in the instructional organization of a school, but the study was limited to this time period for two reasons. One of the reasons lay in the intent of the overall research project of which the collection of questionnaire data was an intimate part. That project was an exploratory one, directed to the problem of identifying the most salient factors of the implementation process that hinder or facilitate the installation of differentiated staffing and similar innovations. Once the salient features were identified, they could be investigated through more extensive, systematic studies. A strategic decision had been reached in planning the overall project to examine the implementation process in its very earliest stages, on the presumption that the stresses and problems of change appear then in their most transparent form. We had reason to believe that the first responses to the problems of implementation significantly shape the innovation's subsequent fate. The project was in no sense to be a summative evaluation of the efforts of the participating schools to implement DS. Thus, in the context of the overall research project, there was no necessity to give the schools a "fair chance to succeed" before administering the questionnaires.

A second consideration, which became more apparent as the investigation proceeded, was that the parties responsible for implementation, themselves, held a short time perspective on the change process. The initial plans for the Overland district's DS project were relatively silent on events beyond the opening of the school year; they contained few provisions for helping school staffs translate structural alterations into appropriate performance, almost as though complex changes in role behavior and role relationships were

expected to occur automatically and instantaneously.* Moreover, project administrators, as well as other local participants and outside evaluators, were making judgments about the schools' "progress" well before the first year was over. And, as it turned out (for reasons too various to summarize here), two of the three schools in Overland's DS project discontinued their participation in the project at the year's end—including Efstutt. Thus, Efstutt's "fair chance" at implementing DS was determined by circumstances in the study setting, not by an arbitrary decision of the research staff.

We must emphasize a limitation of the substantive conclusions in the present report before proceeding to summarize them. As the foregoing discussion suggests, our principal intent in administering questionnaires in the Efstutt school (and Overland's other two DS schools) was to supply systematic data to supplement the information that was being obtained by intensive case-study methods. We did not initially intend the questionnaire results to stand alone. Had we so planned, the design of the study would have been different, using a substantially larger number of cases and collecting data before the onset of implementation and again at the end of the year. As the situation stands, the present report offers relatively little in the way of diagnosis or explanation, concentrating instead on comparative descriptions at a single point in time. The perilousness of basing comparisons on two cases, each with its own unique characteristics and idiosyncracies, should be obvious.

Comparisons of the Schools—A Summary

At the beginning of the school year in September 1970, a number of structural conditions were instituted in Efstutt school in connection with the plans for implementing a DS program—conditions that made Efstutt's instructional organization depart significantly, in a formal sense, from the organization in the otherwise similar comparison school, Gordon. The most important of the conditions were:

* W. W. Charters, Jr., and Roland J. Pellegrin, "Barriers to the Innovation Process: Four Case Studies of Differentiated Staffing," *Educational Administration Quarterly*, 1972, 9, 3-14.

1. The employment of a large number of teacher aides and their assignment to work with teachers in the instructional domain.
2. The presence of a smaller number of certified classroom teachers than was warranted by the district-wide staff assignment formula.
3. The formal designation of three instructional teams and four curriculum teams and the assignment of staff members to each.
4. The appointment of teacher-leaders of the seven teams, with contractual provisions for salary differentials.
5. The appointment of a person (from outside the school district) to fill a new, high-level position of instructional coordinator.

In addition, the Efstutt staff had prepared job descriptions for all of the school's positions in the previous spring, and these "took effect" in September. There were some other new conditions that held minor consequences for the organization of instruction (the employment of an additional, half-time music teacher, the creation of a distinction between "associate instructor" and "instructor") and a few that merely established a parity between the Efstutt and Gordon programs (the appointment of a reading specialist).

Teacher Attributes

The first set of findings we reported focused on the instructional goals and objectives held by staff members and on their orientations to "professional" and "employee" definitions of the teacher's role. The measures showed that Efstutt and Gordon teachers did not differ notably in the instructional objectives they regarded as important, in the barriers they saw to the achievement of their objectives, nor in the strength of their orientations to the professional and employee roles. Further analyses in Efstutt indicated that teacher agreement on instructional goals was not universally high among teachers assigned to instructional teams and that persons appointed to team leader positions were not distinctively different in their orientations to the teacher's role from rank-and-file staff members.

Teaching behavior. The role performance of teachers, as measured by the checklist of teacher activities, had the same general configuration in the two schools, although some specific differences could be observed. The presence of paraprofessionals apparently

had relieved the Efstutt faculty of some of its clerical burden, but the teachers seemed to be devoting more energy than Gordon teachers to monitoring pupils and to handling problems of student decorum. The proportionally greater number of adults in Efstutt's classrooms --both aides and student teachers—had the effect of deflecting a considerable amount of teacher time to the tasks of scheduling and supervising their work. Efstutt teachers, too, were deeply enmeshed in other instructional management activities, such as grouping students, arranging schedules, and apportioning instructional space. Leaders of Efstutt's instructional teams, interestingly enough, were no more heavily implicated in such activities than regular staff members. Far greater time and energy of Efstutt teachers was given over to attendance at meetings than of Gordon teachers. Whether for these or other reasons, Efstutt teachers apparently were able to devote less time than the Gordon faculty to teaching activities indicative of individualization of instruction.

Instructional relationships. Insofar as the division of instructional labor is concerned, the two schools were almost identical. Each classroom teacher continued to be responsible for math, science, language arts, and social studies, while subject-area teachers taught music and physical education independently of the classroom teachers. After the non-certificated art instructor left in the middle of the year, classroom teachers resumed responsibility for art instruction as well. There was little evidence of an informal division of labor among Efstutt teachers along subject-matter lines; indeed, less so than in Gordon. Thus, the cross-graded instructional teams had not replaced the individual classroom as the functioning instructional unit. (Nor was there indication that membership on curriculum teams had affected teaching activities.)

Our measures of task interdependence demonstrated that few Efstutt teachers regarded their instructional work as intimately connected with the work of other grade-level or subject-area teachers, the support specialists (the counselor, the IMC director, the reading specialist), the instructional coordinator, or the principal. The measures of task-related communication reinforced these observations. While virtually all faculty members in both schools were

locked into a vigorous system of communication about affairs unrelated to school. discussions about school problems and, especially, about day-to-day instructional work were relatively infrequent among classroom teachers or between them and the principal. What differences there were between the schools in the nature of these communication flows seemed to be a product of the events, disruptions, and school-wide problems accompanying Efstutt's participation in a major experimental project. In any event, in regard to the instructional relations of Efstutt teachers to other members of the professional staff, each teacher continued to perform his classroom work as an independent agent.

In one significant respect, however, instructional relationships in Efstutt differed profoundly from those in Gordon—a difference due to the presence of paraprofessionals. Each Efstutt teacher had "his" teacher aide in the classroom for part of the day, and an array of essentially one-to-one task interdependencies emerged in the school. Teachers and their aides talked constantly about the instructional activities in which they were mutually engaged, giving rise to a volume of task-related communication unlike anything in Gordon school.

Decision making. The amount of freedom teachers felt they had in making independent decisions about their own classroom instructional activities barely differed between the Efstutt and Gordon schools (it was high in both cases). There was no indication that responsibility for instructional decisions had shifted to colleague groups in Efstutt as one might expect under the team teaching provisions of a DS program; only in a few areas of instructional choice did Efstutt teachers, more often than Gordon teachers, report "close colleagues" as an important limitation on their freedom. The most often-noted constraints on classroom decisions in both schools were impersonal in origin (limitations of time, space, resources, schedules) rather than constraints of district policy or those imposed by administrative or supervisory personnel. On this matter, however, there were small but consistent differences between the schools: Efstutt teachers more regularly reported the impersonal types of constraint as limiting them than did their counterparts in Gordon.

With respect to decision processes apart from the realm of direct instruction, Efstutt teachers, like Gordon teachers, were little involved in evaluating the work performance of their peers, either formally or informally. Staff evaluation still remained the bailiwick of the principal.

Our measures of the distributions of influence and of personal esteem in regard to issues of general school concern showed the Efstutt and Gordon schools to be similar in certain respects and dissimilar in others. An outstanding point of similarity was the principal's dominance of the influence structure. The dissimilarities, for the most part, were not strong and not readily attributable to the DS program. There was evidence of a greater dispersion of influence and esteem across the teaching faculty in the Efstutt school, but it was not due to the emergence of a second echelon of influence among team leaders; they were no more influential and no more esteemed, on the whole, than rank-and-file staff members. Why the greater dispersions existed was left unresolved. One feature of DS implementation, however, had a decided impact in Efstutt. The structural change creating the position of instructional coordinator introduced a new element in the school—a person whose influence in school-wide issues was second only to the principal. While the instructional coordinator may not have figured prominently in the work system of classroom instruction, he did in the school's authority system.

The measure of DS meanings. One measure in the questionnaire, on which we did not comment in the body of the report, was designed to serve a particular purpose of the intensive case study. The key feature of it was a free-response question asking teachers to describe the meanings they attached to the term, "differentiated staffing." The research staff expected to use responses to measure the clarity of teachers' understandings of the innovation they were engaged in implementing and, especially, the extent to which they interpreted the innovation as requiring new role behavior and working relationships of them. Unfortunately, the question wording contained flaws that introduced certain ambiguities in the responses and prevented them from being used for their intended purpose. A related question,

a self-rating of staff clarity regarding the concept, did provide useable responses. Further details on this section of the questionnaire are presented in Appendix C.

An Interpretive Commentary

The detailed findings we have just reviewed point toward two general inferences about the innovation process. First, the clearest differences between the Efstutt and Gordon schools were associated with structural changes that introduced new personnel into Efstutt—the instructional coordinator and, especially, the classroom paraprofessionals. As we suggest in Chapter I, some structural changes are almost inescapable in their impact on the school and its work system, if for no other reason than their alteration of the immediate circumstances in which work is performed. This was certainly the case with the paraprofessionals. In the case of the instructional coordinator, however, the impact was not on the instructional work system but on the school's authority system, perhaps by virtue of a tendency in the staff to assimilate that role to the more familiar one of vice-principal. In any event, the question of the particular impact of such impelling structural changes is an open one. Undoubtedly, the consequences are several, and not necessarily all congruent with the effects initially intended.*

Other structural changes, though, have little compelling impact of their own, one way or another. The most obvious cases in point in Efstutt were the instructional teams and the team-leader positions. A simple decree that three instructional teams henceforth were in existence and that such-and-such teachers were to be members did not assure that behavioral alterations would occur in instructional organization. The creation and appointment of teachers to the position of team leader, accompanied by written job descriptions and even by additional salary, did not automatically certify that appointees

* Whether or not, in Efstutt's situation, the paraprofessionals and the instructional coordinator contributed to the school's operations in the ways that had been envisaged for them requires more detailed information than the questionnaire data offer. For a direct analysis of the point, see Jones, Elementary School Under Planned Change.

would assume the particular role in instructional leadership anticipated for them. It appears that the conversion of such structural changes to behavioral reality requires the investment of extensive supporting resources.

The summarized findings point to a second observation about the innovation process, one to which we have alluded from time to time throughout the report. It concerns what might be called the *disruption effects* of planned change.

Major implementation projects are normally accompanied by circumstances that divert teacher attention away from the duties they regard as their foremost responsibility. The diversionary circumstances and events are of many varieties. Some, of course, are deliberately planned components of the change project—ostensibly designed to aid staff members in learning new techniques and changing their patterns of performance (workshops, outside speakers, visits to exemplary schools, in-service courses). Other circumstances are the products of inescapable structural alterations, such as those mentioned above, that confront teachers with new relationships to work out, new tasks to pursue, and new problems to resolve. Additionally, there are numerous demands on school staffs that seem to be bound inimically to any widely-publicized, externally-financed educational experiment (visiting educators, outside evaluators, questionnaires, report forms), and if classroom teachers are expected to participate centrally in planning and directing the change project, as they often are, the time demands multiply enormously (planning meetings, crisis meetings, staff presentations, last-minute reports). And problems bring problems. Implementing a major change can hardly be expected to proceed like clockwork, so that teachers typically are confronted with signal changes, irregularities in schedules, and periods of uncertainty—conditions which sometimes are sufficiently disturbing to pupils to eventuate in problems of classroom control.*

All of these circumstances compete for teacher time and attention

* The Efstutt case-study materials underscore the importance of this point. Disciplinary problems became the dominating concern of the staff during the implementation year. Jones, *ibid.*

and, in a real sense, constitute hidden costs of change. The detailed comparisons between Efstutt and Gordon recorded instances, time and again, of energy diversion among Efstutt teachers—heavy meeting attendance, attention to problems of pupil decorum, work in supervising teacher aides, concern with coordinating the instructional program, amount of discussion devoted to gripes and concerns about work, constraints on teaching of time, space, and scheduling, and so on. These are costs to instruction, *per se*. In our view, it is unreasonable for educators to expect to see gains in pupil achievement at the end of one or two years of implementation and, indeed, to judge an innovation as a "failure" when the gains are not forthcoming. Energy diversions entail personal costs to teachers, too. If the costs run too high, teachers can be counted on to forego change in order to concentrate their energies on carrying out, in the familiar manner, the instructional tasks for which they hold themselves responsible. When excessive, the costs of change carry the imminent threat of staff disaffection with the innovation.

While the hidden costs often are unacknowledged, or overlooked, by those who plan educational innovations, it is difficult to see how meaningful change can take place without incurring many of them. They should be recognized in advance, so that false expectations of success are not entertained and provisions can be made during the implementation phase for minimizing or absorbing them.

APPENDIX A

Professional and Employee Role Orientation Scales

CASEA's measure of orientations to the professional and employee roles of the teacher was based directly on the prior conceptual and methodological work of Ronald Corwin.* Our principal task was to abbreviate his scales. Here we will describe Corwin's conceptualization of the dimension and certain of his considerations in operationalizing it, and we will report the results of our own methodological analyses.

The Role Orientations

Corwin addressed himself to a problem of general theoretical interest among sociologists: the conditions that arise from the intersection of two distinct bases of authority when professional personnel go to work in a bureaucratic setting. Specifically, Corwin regarded a *professional* definition and an *employee* definition of the teacher's role as alternative and fundamentally conflicting modes of relating teachers to the public school.

On the one hand, the teacher may be expected to fit into an organizational scheme in which (1) work is highly standardized, governed by rules, and routinized with regard to the treatment of students and their problems; (2) decisions are made centrally and teachers are expected to comply; (3) teachers' prime responsibilities are to the administration and the employing organization, including the local community; and (4) teacher performance

* Ronald G. Corwin, *The Development of an Instrument for Examining Staff Conflicts in the Public Schools*, U.S. Department of Health, Education, and Welfare, Office of Education, Cooperative Research Project No. 1934, 1963.

is evaluated primarily in terms of efficiency and technique. The teacher in this scheme is regarded as a responsible, salaried employee of the school district, and to the extent that a person defines the teacher role in these terms, he is said to have an *employee* orientation to the teacher role.

On the other hand, the organizational plan into which a teacher fits may involve little in the way of standardization, stressing instead (1) the uniqueness of both student problems and teacher competencies; (2) decentralized decision making and heavy teacher participation in policy formulation; (3) primary loyalty of teachers to their professional colleagues and students rather than to the administration; and (4) teacher evaluation principally in terms of mastery of theoretical knowledge and their competence in aiding students. Generally, the base of authority governing the teacher's work lies in the profession and is internalized in the course of training; his authority is not a reflection of the bureaucratic system of his employing organization. Corwin referred to a person as having a *professional* orientation in the degree that he defines the teacher's role in these terms.

In his initial efforts toward operationalization, Corwin treated the two kinds of role definition as ideal types, each inherently complex and multidimensional. Although it would seem logical to do so, he did not pose them as polar opposites. He outlined the main sub-dimensions of each type and constructed questionnaire items to sample them. Sub-dimensions of professional orientation included:

Orientation to students,
Orientation to the profession and professional colleagues,
Belief that competence is based on knowledge,
Belief that teachers should have decision-making authority.

Sub-dimensions of employee orientation were:

Loyalty to the administration,
Loyalty to the organization,
Belief that teaching competence is based on experience and a view that personnel can be treated interchangeably,
Endorsement of standardization,
Emphasis on rules and procedures,
Loyalty to the public.

Corwin produced two separate Likert-type scales to measure the strength of the role orientations. After an item analysis procedure, his professional orientation scale included 16 items, the employee orientation scale 29 items.

Inasmuch as Corwin found a zero correlation (+.07) between the two

scales in his initial study, based on 286 secondary teachers in Ohio, he retained them as separate measures. Thus, a teacher could be strongly oriented to the employee role and not to the professional role, to the professional role but not to the employee role, to both, or to neither. In a subsequent study of 1500 Midwestern high school teachers, however. Corwin found a stronger, negative correlation (−.57) between the two scales.* We will report our own findings in relation to this shortly.

Abbreviation of the Scales

In an effort to shorten Corwin's scales, the CASEA staff selected one or two items from each of the sub-dimensions noted above, relying in part on the *scale value difference ratios* Corwin had provided in his technical report. Also, we chose items so as to minimize redundancy in item content. We ended with the 12 items reproduced in Table A-1.

The 12 items were included in the questionnaire administered to approximately 100 teachers in the Efstutt and Gordon elementary schools, a junior high school, and a senior high school. All items then were intercorrelated to determine their coherence within each scale and the distinctiveness of items between the two scales. The intercorrelation matrix is reproduced in Table A-2, showing only the statistically significant values ($p.<.05$) to facilitate inspection.

Examination of the intercorrelations reveals several facts. First, two of the items of the professional orientation scale were not significantly correlated with the other four items of that scale. Indeed, they were positively correlated with certain items of the employee orientation scale. This observation led us to delete those two items, 1 and 11, from the final scoring of the professional scale.

Second, once these two items are removed, the intercorrelations demonstrate generally positive relationships between items of the same scale, although they are not strong (the highest value is .51). Coherence is clearest in the case of the employee orientation scale.

Third, the correlations of items across scales are either zero or modestly negative (disregarding Items 1 and 11), suggesting a degree of distinctiveness of the two scales. The magnitudes of the negative cross-scale correlations, which generally are on the same order as the within-scale correlations, point to the possibility that the two scales can be conceived as measuring opposite ends of the same continuum.

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* *Ibid.*, p. 128.

TABLE A-1

PROFESSIONAL AND EMPLOYEE ORIENTATION ITEMS SELECTED FROM CORWIN'S SCALES

Professional Role Orientation	*Employee Role Orientation*
*1. A teacher should be an active member of at least one professional teaching association and attend most conferences and meetings of the association.	2. A good teacher is one who conforms, in general, to accepted standards in the community.
3. It should be permissable for the teacher to violate a school rule if he is sure that the best interests of the students will be served in doing so.	4. In case of a dispute in the community over whether a controversial textbook or speaker should be permitted in the school, teachers should look primarily to the judgment of the administration for guidance.
5. The ultimate authority over the major educational decisions should be exercised by professional teachers.	6. The school should have a manual of rules and regulations which are to be followed seriously.
7. Teachers should try to live up to what they think are the standards of their profession even if the administration or the community does not seem to respect them.	8. Teachers teaching the same subject throughout the system should follow the same kind of lesson plan.
9. A teacher should try to put his standards and ideals of good teaching into practice even if the rules and procedures of the school prohibit it.	10. Teachers should adjust their teaching to the administration's view of good educational practice.
*11. Teachers should be evaluated primarily on the basis of their knowledge of the subject that they teach and on the basis of their ability to communicate it.	12. In case of doubt about whether a particular practice is better than another, the primary test should be what seems best for the overall reputation of the school.

* Not included in final scoring

TABLE A-2

INTERCORRELATIONS OF PROFESSIONAL ORIENTATION AND EMPLOYEE ORIENTATION ITEMS*

	Professional Orientation						*Employee Orientation*				
	1	3	5	7	9	11	2	4	6	8	10
3		–									
5		.23	–								
7			.23	–							
9		.40		.23	–						
11						–					
2					–.25		–				
4		–.19			–.29		.27	–			
6		–.25			–.27		.24	.34	–		
8			–.22			.21	.24	.25	.25	–	
10	.23						.41	.51	.34	.35	–
12					–.26	.23	.23	.45	.34	.32	.40

* N's range from 101 to 108. Only correlations significant beyond the .05 level are tabled.

To examine the latter possibility, total scores were obtained for respondents over the 4-item professional orientation measure and the 6-item employee orientation measure and correlation coefficients were computed. As reported in the text, the overall correlation was –.34. Interestingly, the value of the coefficients differed for staff members at different teaching levels.

Teaching Level	*r*	(*N*)
High school	-.57	(34)
Junior high school	-.35	(21)
Efstutt elementary school	-.17	(15)
Gordon elementary school	-.12	(17)
All teachers	-.34	(87)

The value of –.57 for the high school teachers corresponds exactly to that obtained by Corwin for his large sample of secondary teachers in the Midwest. As our data demonstrate, the correlations were lower in the junior

high school and even lower in the two elementary schools. While the number of cases is undependably small, these results point to the possibility that conceptions of the teacher's role are differently organized at the elementary and secondary levels, that secondary teachers regard the two role orientations as mutually exclusive, whereas elementary teachers do not. This possibility bears further investigation.

In light of the equivocality of the relationship between the scales, we have followed Corwin's precedent and have analyzed and reported scores for the professional and employee orientations separately.

APPENDIX B

Measure of Instructional Decisions

The decision-making processes and related phenomena in complex organizations, such as individual *autonomy*, *participation* in decisions, amount of *influence*, and the like, present formidable problems of conceptualization as well as empirical measurement and description. The measurement of instruction-related decisions developed by the CASEA research staff for the present project was based on a careful review and analysis of the procedures used in a number of empirical studies of school decision making, with special attention to the work of Meyer and Cohen and the set of measures that had been used previously in CASEA's Attributes Project.*

* James A. Belasco, Joseph A. Alutto, and Alan Glassman, "A Case Study of Community and Teacher Expectations concerning the Authority Structure of School Systems," *Education and Urban Society*, 1971, *4*, 85-97; Bryce M. Fogarty and Russell T. Gregg, "Centralization of Decision Making and Selected Characteristics of Superintendents of Schools," *Educational Administration Quarterly*, 1966, *2*, 62-72; William E. Moran, "Measurement of Decentralization in University Organizations," *American Educational Research Journal*, 1971, *8*, 203-219; John Meyer and Elizabeth Cohen, *The Impact of the Open-Space School upon Teacher Influence and Autonomy*, Technical Report No. 21, Stanford Center for Research and Development in Teaching, Stanford University, Stanford, California, 1971; Henry J. Otto and Donald J. Veldman, "Control Structure in Public Schools and the Decision and Influence Roles of Elementary School Principals and Teachers," *Educational Administration Quarterly*, 1967, *3*, 149-161; Roland J. Pellegrin, "Professional Satisfaction and Decision-Making in the Multiunit School," Technical Report No. 7, Center for the Advanced Study of Educational Administration. University of Oregon, Eugene, Oregon, May 1970; C. L. Sharma, "Who Should Make What Decisions?" *Administrator's Notebook*, 1955, *3* (No. 8), 1-4; John L. Wallen, *Charting the Decision Making Structure of an Organization*, Program Report: Improving Teaching Competencies, Northwest Regional Educational Laboratory, Portland, Oregon, 1970.

While neither the conceptual nor the operational problems have been entirely solved by the research staff, certain distinctions were established and found helpful in measure development that are worth recording. Here we can note them only briefly.

1. *Instructional* vs. *instruction-context decisions.* The focus of the measure was on instructional decisions—*i.e.*, the choices made by *individual* teachers as they engage in the core activities of the teacher's instructional role—as distinct from decisions of a more general character in the school or school district, even though the latter might have a distinctive bearing on the latitude of choice in the instructional domain (*e.g.*, a staff policy decision to limit the homework teachers may assign to pupils). Another, separate part of the questionnaire was concerned with staff involvement in school-wide context decisions.

2. *Decisions* vs. *constraints on decision.* Closely allied with the foregoing point was the recognition that instructional decisions (as all decisions) are necessarily constrained in various ways—by impersonal circumstances, by personal limitations, by governing policies established elsewhere in the school, and so on. Thus, a teacher might have wide latitude in his instructional decisions (few constraints), but have little voice in establishing the few constraints that impinge on him; or, conversely, his decisions may be highly constrained, but by policy decisions he has helped to formulate.

3. *Types of constraint.* In order to check Pellegrin's propositions in the present study, a distinction was drawn between constraints of an impersonal variety, those established as policy and enforced hierarchically, and those arising among one's colleagues.* (Subdistinctions were introduced in the policy constraints to reflect the "remoteness" of their origination from the teacher.) The type of constraint was presumed to bear on the teacher's psychological sense of freedom, or autonomy.

4. *Selecting aspects of instruction for investigation.* There are many aspects of the instructional process in which teachers might conceivably make choices. A prime consideration in selecting eight for inclusion in the investigation was their relatively unrestricted character in the traditional self-contained classroom situation and susceptibility to restriction under the team teaching situation of differentiated staffing.

5. *Differences in constraints according to aspects of instruction.* It was assumed that the various aspects of the instructional process would be subject to different types of constraint, arising in different locales within the school district. Teacher choices regarding pupil evaluation procedures, for example, may be governed by the existence of a district-wide testing program, while choices relating to discipline

* See Chapter V.

practices may be constrained primarily by a principal's expectations in the local school. Thus, statements about the decision structure cannot automatically be generalized from one aspect of teaching to other aspects.

6. *Objective description of circumstances* vs. *subjective responses to circumstances.* A conceptual distinction was maintained between the objective decision structure of the school and the subjective responses of teachers to this structure, between objective and subjective "autonomy." Operationally, an effort was made to measure independently the objective constraints on choice (albeit through the reports of teachers) and the teachers' psychological feelings of freedom.

We should note a further complicating factor in the construction of the measure—the fact that it was to be used in the present study in both elementary and secondary schools. The governance systems of the two levels of school are sufficiently different that it was difficult to word the questions and alternatives so they would be applicable in both settings. The compromise wordings, we believe, blunted the interpretability of the responses.

How well the measure succeeded in describing the decision structure of the schools must rest at this point primarily upon the researchers' impressionistic judgments. The assumption of differences in decision structure among the various aspects of instruction clearly was borne out by the data, but the wording and listing of "limitations," we believe, require revision in subsequent instruments. Some were so rarely checked (*e.g.*, "decisions of a formal committee in the building"), and so difficult to interpret when they were, that they could well be deleted.

The research staff conducted special analyses of the relationship between the number and types of limitations on teaching, as reported by teachers, and the amount of freedom, or autonomy, they believed they had. In order to overcome the restrictions of the small number of cases, coupled with the fact that so few of them said they felt anything other than "considerable freedom" in their teaching, the responses of classroom teachers in the two secondary schools—a junior and a senior high school—that had been obtained in the same school district at the same time were combined with the elementary school data.

For the analyses, teachers who said they had "moderate" or "little freedom" in each aspect of instruction were grouped together ("non-autonomy") and contrasted with those who said they had "considerable freedom" in their choices ("autonomy"). Table B-1 gives the mean number of limitations on freedom checked for each aspect of instruction by the two groups of teachers. The comparisons reveal that the teachers who felt less autonomy listed one and one-half to two times as many limitations as those who felt autonomous. This was consistent across all eight areas of instructional choice. Thus,

the greater the number of constraints on teachers, the less autonomy they feel they have.

TABLE B-1

RELATIONSHIP BETWEEN AMOUNT OF TEACHER FREEDOM IN EIGHT ASPECTS OF TEACHING AND NUMBER OF LIMITATIONS REPORTED ELEMENTARY AND SECONDARY TEACHERS

	Considerable Freedom		Moderate or Little Freedom	
Aspect of Teaching	*Mean Number of Limitations*	*N*	*Mean Number of Limitations*	*N*
Teaching materials	1.56	86	3.00	12
Subject emphasis	1.25	68	2.47	30
Pace of teaching	1.12	69	1.86	29
Teaching techniques	1.15	88	1.60	10
Assessing students	1.11	70	2.14	28
Student grouping	1.03	60	1.83	48
Relating to pupils	.78	91	1.57	7
Classroom control	.93	80	2.28	18

The next table, Table B-2, provides the means for determining which particular types of constraint most strongly affected feelings of autonomy. The table gives the percentage of times the various limitations in the questionnaire were checked by "autonomous" and "non-autonomous" teachers, for each aspect of instruction.

The outstanding fact in the table is that teachers who felt autonomy were consistently more inclined than their less autonomous colleagues to identify impersonal constraints—limitations of time, space, resources, and the schedule. Said differently, the impersonal constraints were more strongly associated, relative to the other constraints, with feelings of autonomy. In all but two areas, on the other hand, constraints imposed by the principal and department or grade-level chairmen were associated with "non-autonomous" feelings. In the two exceptional aspects (subject emphasis and student grouping), the constraints with "non-autonomy" were district requirements and practices, supplemented, in the case of student grouping, by constraints imposed by supervisors from outside the building. In only one instance (the timing and pacing of instruction) were constraints from one's fellow teachers a factor in reducing autonomy.

Table B-2

TYPES OF CONSTRAINT ON EIGHT ASPECTS OF INSTRUCTION
REPORTED BY RELATIVELY AUTONOMOUS AND RELATIVELY NON-AUTONOMOUS TEACHERS
ELEMENTARY AND SECONDARY*

(Percentage Distribution)

Type of Constraint	*Teaching Materials*		*Subject Emphasis*		*Pace of Teaching*		*Teaching Technique*		*Assessing Students*		*Student Grouping*		*Relating to Pupils*		*Classroom Control*	
	Aut	*Non*	*Aut*	*Non*	*Aut*	*Non*	*Aut*	*Non*	*Aut*	*Non*	*Aut*	*Non*	*Aut*	*Non*	*Aut*	*Non*
District requirements, guidelines, practices	13	15	16	28	18	15	13	13	28	32	3	13	11	18	18	19
Advice of central office consultants	5	—	6	7	5	—	3	6	5	5	—	7	2	—	1	10
Advice of building consultants	4	4	5	8	3	2	1	6	1	7	3	5	1	10	7	5
Advice of principal, grade chairman	10	23	11	11	6	13	12	19	9	18	13	13	14	27	19	32
Decisions of committee in building	2	8	1	1	—	2	1	—	5	8	3	7	3	—	4	2
Decisions of close colleagues	14	15	15	15	16	24	15	12	13	17	15	19	17	18	23	15
Limits of time, space, resources, schedule	52	35	46	30	52	44	55	44	39	13	63	36	52	27	28	17
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
(Number checked)	(135)	(26)	(85)	(74)	(77)	(54)	(100)	(16)	(78)	(60)	(62)	(85)	(71)	(11)	(78)	(41)

* Aut: Teachers who reported "considerable freedom" of choice in a given aspect of instruction.
Non: Teachers who reported "moderate" and "little freedom" of choice in a given aspect of instruction.

We must hasten to add, however, that our analyses leave open the question of causality—whether it was constraining conditions that affected autonomy or whether feelings of autonomy, however caused, colored the number and types of constraints teachers reported. To the degree that our operational measure failed to maintain the distinction between objective reports of constraints and subjective feelings of autonomy, the latter interpretation of causality is a plausible one.

APPENDIX C

Measure of Meanings Attributed to "Differentiated Staffing"

Two questions were included in the instrument to measure the clarity and specificity with which instructional staff members interpreted the meaning of "differentiated staffing," one a fixed-response self-relating question of clarity and the other a free-response question asking teachers to furnish their views of DS in a few brief phrases. The questions read as follows:

1. "Differentiated staffing," like many current educational innovations, seems to mean different things to different people. How clear would you say your idea is of what "differentiated staffing" means, especially as the term has been used in Overland in recent years?

   (*check one*)

   —— Fairly clear idea of what it means
   —— Rough idea of what the term means
   —— Only an extremely vague or hazy idea of what it means
   —— Have never heard of it, or have paid no attention to it

2. Please describe briefly what "differentiated staffing" means to you as you see it operating in your school. Some key phrases will do.

Table C-1 gives the distribution of responses to the self-rating question on clarity for the three Overland schools involved in the district's DS project and for Gordon Elementary School (where the questions inadvertently had been included in the questionnaire instrument) and shows, among other things, that not a single Overland teacher acknowledged that he had never

TABLE C-1

DISTRIBUTION OF SELF-RATINGS OF THE CLARITY OF THE TERM "DIFFERENTIATED STAFFING" FOUR OVERLAND SCHOOLS

Clarity	*High School*	*Junior High School*	*Efstutt*	*Gordon*
Fairly clear	28	22	11	8
Rough idea	7	2	4	9
Extremely vague or hazy	2	–	–	3
Never heard or paid no attention	–	–	–	–
Not ascertained	1	–	–	1
Total	38	24	15	21

heard of, or had paid no attention to, "differentiated staffing." The data also indicate that about three-quarters of the teachers in Efstutt and the high school and over 90 percent of the junior high teachers said they had a "fairly clear idea" of the term's meaning. This contrasts with the Gordon school, uninvolved in the DS project, where less than half of the teachers made the same claim. By these responses, then, "differentiated staffing" was in the common parlance of the Overland district staff, but it was better understood in the schools where it had been the subject of implementation efforts.

Scoring the second question, however, presented a problem. The research staff had planned to code the content of the free responses according to the extent of *behavioral specificity* teachers attributed to "differentiated staffing" —*i.e.*, the degree to which teachers interpreted the term as calling for changes in their own teaching behavior and working relationships—but defects in the question wording made it impossible to obtain unambiguous measures.

The phrase, "as you see it operating in your school," induced a number of replies to the effect that it was not in operation. While some of these respondents went on, sometimes vehemently, to express their feelings about the failure of the DS project, as they saw it, their replies contained no information regarding the substantive meanings they attached to the concept. (The phrase, too, rendered the question meaningless to teachers in the Gordon school.)

The request for a "brief" description and the question's statement, "some

key phrases will do" (included to encourage responses at the end of a long questionnaire), further compromised the purpose of the question. The wording virtually assured the use of stereotyped, "party-line" characterizations rather than behaviorally-specific descriptions, even among teachers who might have interpreted "differentiated staffing" highly concretely.

For these reasons, responses to the second question were not analyzed further, at least not for the present report.

APPENDIX D

Questionnaire
(Elementary School Form)

Center for the Advanced Study of Educational Administration
University of Oregon
Eugene, Oregon

The questions that follow are designed to provide supporting information for the in-depth study of your school that has been conducted this year by staff members of the Center for the Advanced Study of Educational Administration. Questionnaires are being completed by teachers in several other school settings as well, and for that reason the questions may not be exactly applicable to your situation.

The questions should be answered only by persons who spend at least part of their time in classroom or individual instruction and should be answered in respect to the teaching part of their work in this school.

We have asked you to give your name only for the purpose of internal identification in the research. Your name, and names of other teachers, will be given a code number as the questionnaires are recorded on tabulation forms, and the original questionnaire will be destroyed. The questionnaire will be seen only by research personnel of the Center for the Advanced Study of Educational Administration, who will hold in strictest confidence the information you have provided.

The questionnaire has been pared to the barest minimum in order to conserve your time. Each question is important, so please give careful consideration to your answers and fill out the questionnaire completely.

Your cooperation and assistance are much appreciated.

Organizational Studies Project
May 1971
Form S

PART I. BACKGROUND INFORMATION *FORM S*

1. Your Name _____

2. Name of Your School _____

3. Sex: ( ) Male ( ) Female

4. Experience as an educator (at the end of this school year)

   ____ years as a teacher

   ____ years as a principal or other building administrator

   ____ years, other (please specify position _____)

5. Experience teaching in this school (at the end of this school year)

   ____ years in present school

6. Please write below the position-title that applies to your employment in your school. If you have more than one position-title, write them all. After each title, put the approximate percentage of full time that your work under that title requires.

   _____ ____ percent

   _____ ____ percent

   _____ ____ percent

7. If you are a member of an instructional team in this school, please identify the team below. If you are not a member of an instructional team, write "not a member."

   _____

   _____

8. Do you have a teaching assistant, or aide, who works with you?

   ____ Yes If yes, how many hours per week? _____

   ____ No

9. Are you supervising any interns or student teachers this term?

   ____ Yes If yes, how many? _____

   ____ No

PART II. THE TEACHER'S INSTRUCTIONAL OBJECTIVES *FORM S*

1. As a teacher you have certain primary instructional objectives or goals you wish to attain. At the same time, you must establish priorities among these objectives. Listed below are several instructional objectives. Please read through the entire list, and then check *those three objectives* to which you give the *highest* relative importance, priority, or emphasis in your own work.

   (*check three*)

   ____ Encouraging creativity among students
   ____ Maintaining an orderly environment for learning
   ____ Enriching the course of study or curriculum for your students
   ____ Giving individual attention to students
   ____ Experimenting with new teaching techniques
   ____ Diagnosing learning problems of students
   ____ Improving the self-image, or self-worth, of individual students
   ____ Coordinating classroom activities with other parts of the school program
   ____ Ensuring that students learn basic skills and subject matter content
   ____ Helping individual students solve their personal problems
   ____ Developing student ability in analytical reasoning and problem-solving
   ____ Developing the aesthetic potential of students
   ____ Helping students develop a good system of values

2. In trying to achieve the three primary objectives you checked above, you may encounter various factors that impede, constrain, or handicap you. Several such factors are listed below. Please read through the entire list, and then check the *three* most important barriers or constraints you face in trying to achieve the primary objectives you chose in Question 1.

   (*check three*)

   ____ Reactions or expectations of other teachers
   ____ Official school district policies and procedures
   ____ Reactions or expectations of your principal
   ____ Conflict with other duties and objectives
   ____ Lack of physical facilities or space
   ____ Reactions or expectations of your students
   ____ Difficulty or complexity of the objectives themselves

_____ Reactions or expectations of parents

_____ Lack of time

_____ Reactions or expectations of central office personnel

_____ Lack of resources

PART III. TEACHER RELATIONSHIPS WITH OTHERS *FORM S*

1. In performing your job as a teacher, you may (or may not) rely upon other persons (besides your students) for assistance or collaboration in getting your own work duties performed. Please list below, by name and position, the persons upon whom you rely most heavily to get your *own work tasks* accomplished.

Name *Position*

_____

_____

_____

_____

2. Who are the persons listed above, if any, whose job is so closely related to yours that you believe the two jobs must be performed *collaboratively* in order for either of you to perform his work effectively?

Name

_____

_____

_____

3. Teachers vary in the extent to which they do collaborative work with other staff members. Please check the item below which best describes your pattern of working.

_____ Nearly all of my work is done independently.

_____ I work in collaboration with others a small part of the time and for limited purposes.

_____ I work in collaboration with others a substantial part of the time and for various purposes.

_____ Nearly all of my work is in collaboration with other staff members.

PART IV. INVENTORY OF TEACHING TASKS *FORM S*

Teachers vary in the time and effort they devote to the tasks listed below. We would like you to assess the time and effort you devote to each task in your work. Please think of these tasks in terms of what you *actually do* on the job—*not* in terms of what you or others think you should do if conditions were ideal.

> In the space beside the number of each task listed below, please enter a "0" if the task occupies *none*, or virtually none, of your time and effort. (If you enter a "0," this means the task is one you rarely or never do.)
>
> Enter a "1" if the task is one to which you devote *moderate* time and effort. (If you enter a "1," this means that you perform the task but it is neither a major nor an insignificant part of your work.)
>
> Enter a "2" if it is a task to which you devote a *major* part of your time and effort. (If you enter a "2," this means that you regard the task as a major part or dimension of your work.)

(*Please enter a 0, 1, or 2 for each of the following tasks*:)

____ 1. Attending school meetings
____ 2. Deciding with other teachers the grade reports students should receive
____ 3. Giving assistance to individual students on class work
____ 4. Teaching vocational subjects
____ 5. Teaching art
____ 6. Scheduling and coordinating the assignment of aides to teachers
____ 7. Developing expertise in one particular curriculum area
____ 8. Teaching music
____ 9. Working with individual students on their learning problems
____ 10. Planning with several other teachers a mode of treating the learning difficulties of particular students
____ 11. Doing bookkeeping chores (checking textbooks, attendance, lunch money, *etc.*)
____ 12. Making out daily lesson plans
____ 13. Instructing or working with small groups of students
____ 14. Developing curriculum guides
____ 15. Demonstrating to other teachers instructional techniques with which you are familiar

____ 16. Making a study of social relationships among students in the class
____ 17. Typing or duplicating materials to use in class
____ 18. Conferring with other teachers on the use of classroom space
____ 19. Coordinating the instructional program for a team of teachers
____ 20. Teaching science
____ 21. Teaching social living
____ 22. Making out grade reports
____ 23. Teaching physical education
____ 24. Becoming an expert in using a particular instructional technique
____ 25. Correcting assignments and written work
____ 26. Acquiring specialized knowledge about learning packages and their use
____ 27. Keeping records on student progress and grades
____ 28. Preparing and holding lessons for large groups of students (larger than class size)
____ 29. Counseling students on their personal affairs
____ 30. Working with specialists from outside the school
____ 31. Conducting "housekeeping" chores—room cleaning and straightening, bulletin boards, *etc.*)
____ 32. Outlining curriculum objectives for a grade or subject area
____ 33. Writing behavioral objectives for individual students
____ 34. Guiding class discussions or recitations
____ 35. Helping decide on appropriate student groupings with other teachers
____ 36. Planning class assignments and projects
____ 37. Gaining technical knowledge about testing and evaluation procedures
____ 38. Developing a strategy with other teachers for handling particular discipline cases
____ 39. Assigning duties to teacher aides or assistants
____ 40. Establishing classroom standards or rules
____ 41. Working with others to select instructional materials for a class

____ 42. Guiding small groups of students on their own special projects
____ 43. Teaching arithmetic
____ 44. Supervising the work of interns or student teachers
____ 45. Teaching language arts
____ 46. Locating and assembling instructional material for class use
____ 47. Inventing new ways to evaluate achievement of class objectives
____ 48. Holding parent conferences
____ 49. Taping or otherwise recording lessons or demonstrations
____ 50. Handling discipline and behavior problems
____ 51. Doing diagnostic work on the learning difficulties of individuals
____ 52. Locating community resource people to work with students
____ 53. Determining with other teachers who will handle which lessons for a class
____ 54. Monitoring hallways, playground, or lunch rooms
____ 55. Conferring with the principal
____ 56. Helping students plan their own studies and projects
____ 57. Presenting lessons and demonstrations
____ 58. Planning the sequence of topics to be covered during the term
____ 59. Holding special remedial sessions with students
____ 60. Conducting case studies of students with behavior or learning problems
____ 61. Systematically studying others' teaching behavior
____ 62. Handling administrative tasks for a group of teachers
____ 63. Assembling a file of curriculum materials for a course of study
____ 64. Administering teacher-made or standardized tests
____ 65. Working out daily or weekly class schedules with other teachers
____ 66. Making up tests and exercises for the class
____ 67. Advising fellow teachers on curriculum matters

PART V. INSTRUCTIONAL ACTIVITIES *FORM S*

1. My instructional activities are supervised and/or evaluated by:

   (*check one or more*)

   ____ Other individual teachers
   ____ A group of other teachers ("peer evaluation")
   ____ The principal or other administrators
   ____ Instructional supervisor
   ____ No one

2. In general, my instructional activities are supervised and/or evaluated by others:

   (*check one*)

   ____ Very often
   ____ Fairly often
   ____ Fairly infrequently
   ____ Rarely
   ____ Never

3. In general, my instructional activities are supervised and/or evaluated:

   (*check one*)

   ____ Very closely
   ____ Fairly closely
   ____ Fairly loosely
   ____ Very loosely
   ____ Not at all

4. My instructional activities are supervised and/or evaluated by:

   (*check one or more*)

   ____ Systematic procedures involving direct evidence of my instructional competency, including observation of my teaching
   ____ Indirect procedures (examples: assessment of pupil achievement records, assessment of maintenance of approved classroom "appearance," assessment of discipline, parental complaints)
   ____ Informal discussion and advice from others
   ____ No definite procedure for supervision and/or evaluation.

5. My instructional activities are supervised and/or evaluated in order to:

(*check one or more*)

____ Assess my performance for the purpose of tenure and salary increases

____ Assess the quality of my instruction

____ Assess my adherence to policies and procedures

____ Assess my control over pupils

____ Assess my adaptability to innovation

PART VI. INTERACTION AND COMMUNICATION *FORM S*

1. How often do you receive reactions or advice from other teachers about your personal:

	Very often (daily or several days a week)	*Fairly often (weekly)*	*Fairly infrequently (biweekly or monthly)*	*Rarely (bimonthly or each semester)*	*Never*
Curriculum planning	____	____	____	____	____
Grading practices	____	____	____	____	____
Teaching of specific lessons or classes	____	____	____	____	____
Student control and discipline practices	____	____	____	____	____
Manner of working with individual students	____	____	____	____	____

2. How often do you talk with other teachers about:

	Very often (daily or several days a week)	*Fairly often (weekly)*	*Fairly infrequently (biweekly or monthly)*	*Rarely (bimonthly or each semester)*	*Never*
General curriculum plans for the class	____	____	____	____	____
The schedule of teaching activities	____	____	____	____	____
Student reactions to a specific lesson	____	____	____	____	____
Getting teaching resources or supplies	____	____	____	____	____
Learning needs of a particular student	____	____	____	____	____
Personal gripes or concerns about work	____	____	____	____	____
Matters unrelated to school and teaching	____	____	____	____	____

3. How often do you talk with teaching assistants about:

	Very often (daily or several days a week)	*Fairly often (weekly)*	*Fairly infrequently (biweekly or monthly)*	*Rarely (bimonthly or each semester)*	*Never*
General curriculum plans for the class	____	____	____	____	____
The schedule of teaching activities	____	____	____	____	____
Student reactions to a specific lesson	____	____	____	____	____

Getting teaching resources or supplies	____	____	____	____	____
Learning needs of a particular student	____	____	____	____	____
Personal gripes or concerns about work	____	____	____	____	____
Matters unrelated to school and teaching	____	____	____	____	____

4. How often do you talk with your principal about:

	Very often (daily or several days a week)	*Fairly often (weekly)*	*Fairly infrequently (biweekly or monthly)*	*Rarely (bimonthly or each semester)*	*Never*
General curriculum plans for the class	____	____	____	____	____
The schedule of teaching activities	____	____	____	____	____
Student reactions to a specific lesson	____	____	____	____	____
Getting teaching resources or supplies	____	____	____	____	____
Learning needs of a particular student	____	____	____	____	____
Personal gripes or concerns about work	____	____	____	____	____
Matters unrelated to school and teaching	____	____	____	____	____

PART VII. INSTRUCTIONAL DECISIONS *FORM S*

Please describe how much freedom of choice you have and the types of limitation that exist on aspects of *your own* day-to-day teaching. Eight aspects of teaching are listed. With respect to each:

On the left, indicate the amount of freedom of choice you have in your own daily teaching. *Check only one* for each aspect.

On the right, indicate which one or ones, if any, of the alternatives you regard as an important limitation on your freedom. *Check all that you consider important limitations.*

A. Selecting and using supplementary instructional materials

(*check one*)

___ Considerable freedom

___ Moderate freedom

___ Little freedom

(*check all important limitations*)

___ Requirements, guidelines, or standard practices of the district

___ Advice of central office consultants, supervisors

___ Advice of specialists or consultants in the building

___ Advice of principal, department or grade chairman

___ Decisions of formal committee in the building

___ Decisions of colleagues with whom you work closely

___ Limits of time, space, resources, or the schedule

B. The subject content to emphasize with students

(*check one*)

___ Considerable freedom

___ Moderate freedom

___ Little freedom

(*check all important limitations*)

___ Requirements, guidelines, or standard practices of the district

___ Advice of central office consultants, supervisors

___ Advice of specialists or consultants in the building

___ Advice of principal, department or grade chairman

___ Decisions of formal committee in the building

___ Decisions of colleagues with whom you work closely
___ Limits of time, space, resources, or the schedule

C. The timing and pacing of your instruction

(*check one*)

___ Considerable freedom
___ Moderate freedom
___ Little freedom

(*check all important limitations*)

___ Requirements, guidelines, or standard practices of the district
___ Advice of central office consultants, supervisors
___ Advice of specialists or consultants in the building
___ Advice of principal, department or grade chairman
___ Decisions of formal committee in the building
___ Decisions of colleagues with whom you work closely
___ Limits of time, space, resources, or the schedule

D. Your methods and techniques of teaching

(*check one*)

___ Considerable freedom
___ Moderate freedom
___ Little freedom

(*check all important limitations*)

___ Requirements, guidelines, or standard practices of the district
___ Advice of central office consultants, supervisors
___ Advice of specialists or consultants in the building
___ Advice of principal, department or grade chairman
___ Decisions of formal committee in the building
___ Decisions of colleagues with whom you work closely
___ Limits of time, space, resources, or the schedule

E. Your means of assessing students' performance

(*check one*)

___ Considerable freedom

___ Moderate freedom

___ Little freedom

(*check all important limitations*)

___ Requirements, guidelines, or standard practices of the district

___ Advice of central office consultants, supervisors

___ Advice of specialists or consultants in the building

___ Advice of principal, department or grade chairman

___ Decisions of formal committee in the building

___ Decisions of colleagues with whom you work closely

___ Limits of time, space, resources, or the schedule

F. The procedure for grouping students for teaching

(*check one*)

___ Considerable freedom

___ Moderate freedom

___ Little freedom

(*check all important limitations*)

___ Requirements, guidelines, or standard practices of the district

___ Advice of central office consultants, supervisors

___ Advice of specialists or consultants in the building

___ Advice of principal, department or grade chairman

___ Decisions of formal committee in the building

___ Decisions of colleagues with whom you work closely

___ Limits of time, space, resources, or the schedule

G. Your style of relating to students

(*check one*)

___ Considerable freedom

___ Moderate freedom

___ Little freedom

(*check all important limitations*)

___ Requirements, guidelines, or standard practices of the district

___ Advice of central office consultants, supervisors

___ Advice of specialists or consultants in the building

___ Advice of principal, department or grade chairman

___ Decisions of formal committee in the building

___ Decisions of colleagues with whom you work closely

___ Limits of time, space, resources, or the schedule

H. Methods of establishing and maintaining classroom control

(*check one*)

___ Considerable freedom

___ Moderate freedom

___ Little freedom

(*check all important limitations*)

___ Requirements, guidelines, or standard practices of the district

___ Advice of central office consultants, supervisors

___ Advice of specialists or consultants in the building

___ Advice of principal, department or grade chairman

___ Decisions of formal committee in the building

___ Decisions of colleagues with whom you work closely

___ Limits of time, space, resources, or the schedule

PART VIII. DECISION MAKING AND PROBLEM SOLVING *FORM S*

1. If you wanted to receive approval from the faculty of your school for an idea or plan you were proposing, it would sometimes be helpful to enlist the support of certain other individuals. Please list below, by name and position, the individuals *whose support* for your idea or plan would be most crucial in getting it approved.

Name	*Position*

2. In a school faculty, some individuals usually make suggestions for the solution of problems that are more useful and reasonable (and are more highly regarded) than are the suggestions made by other persons. Please list below, by name and position, those individuals in your school whose *suggestions* you would expect to be most useful in solving school problems.

Name	*Position*

PART IX. VIEW OF DIFFERENTIATED STAFFING *FORM S*

1. "Differentiated staffing," like many current educational innovations, seems to mean different things to different people. How clear would you say your idea is of what "differentiated staffing" means, especially as the term has been used in Overland in recent years?

   (*check one*)

   ___ Fairly clear idea of what it means
   ___ Rough idea of what the term means
   ___ Only an extremely vague or hazy idea of what it means
   ___ Have never heard of it, or have paid no attention to it

2. Please describe briefly what "differentiated staffing" means to you as you see it operating in your school. Some key phrases will do.

PART X. TEACHER OPINIONS *FORM S*

In this section we would like to get *your opinion* on a number of matters regarding teaching and the teacher's role. Please check the alternative on the right that best describes the extent of your agreement or disagreement with each of the following statements.

Symbols: *SA* = *Strongly agree*
A = *Agree*
MA = *Moderately agree*
MD = *Moderately disagree*
D = *Disagree*
SD = *Strongly disagree*

	SA	*A*	*MA*	*MD*	*D*	*SD*
1. A teacher should be an active member of at least one professional teaching association and attend most conferences and meetings of the association.	___	___	___	___	___	___
2. A good teacher is one who conforms, in general, to accepted standards in the community.	___	___	___	___	___	___
3. It should be permissable for the teacher to violate a school rule if he is sure that the best interests of the students will be served in doing so.	___	___	___	___	___	___
4. In case of a dispute in the community over whether a controversial textbook or speaker should be permitted in the school, teachers should look primarily to the judgment of the administration for guidance.	___	___	___	___	___	___
5. The ultimate authority over the major educational decisions should be exercised by professional teachers.	___	___	___	___	___	___

	SA	*A*	*MA*	*MD*	*D*	*SD*
6. The school should have a manual of rules and regulations which are to be followed seriously.	___	___	___	___	___	___
7. Teachers should try to live up to what they think are the standards of their profession even if the administration or the community does not seem to respect them.	___	___	___	___	___	___
8. Teachers teaching the same subject throughout the system should follow the same kind of lesson plan.	___	___	___	___	___	___
9. A teacher should try to put his standards and ideals of good teaching into practice even if the rules and procedures of the school prohibit it.	___	___	___	___	___	___
10. Teachers should adjust their teaching to the administration's views of good educational practice.	___	___	___	___	___	___
11. Teachers should be evaluated primarily on the basis of their knowledge of the subject that they teach and on the basis of their ability to communicate it.	___	___	___	___	___	___
12. In case of doubt about whether a particular practice is better than another, the primary test should be what seems best for the overall reputation of the school.	___	___	___	___	___	___

Thank you again for your cooperation.