

COORDINATION IN SECONDARY SCHOOLS AND ITS IMPLICATIONS FOR STUDENT ACHIEVEMENT

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Introduction

Regarding school organizations the concept of coordination is subject to theoretical and empirical controversies. One can discern two contrasting views. The first rejects the notion that schools are tightly linked bureaucracies. It accepts the proposition that schools lack close internal coordination and that content and methods of instruction tend to be linked loosely to the control and influence of both the bureaucratic and collegial aspects of schools (cf. Cohen, March & Olsen, 1972; Meyer & Rowan, 1979; Weick, 1979).

The second view states that schools differ on these aspects. Although not as sharply focused on coordination as the literature on 'loose coupling', the growing body of literature on 'effective schools' points to the importance of coordination. Teachers may assume shared responsibility for accomplishing a set of objectives, depending on their shared attitudes toward pupils and shared conceptions of effective instruction. Further, schools may differ in the way school management employs school-wide plans and schedules (structural linkages) with regard to the instructional system and in the way school management controls and evaluates the instructional system (cf. Rosenholtz, 1989).

The above leads to two questions guiding this research project. First, it is clear that teaching is controlled and coordinated, but unknown is the nature and extent of coordination within schools. The first question guiding this research project is related to this problem.

Besides, the effects of instructional coordination are unknown. The reason for coordination is organizational effectiveness, yet much has to be learned about the exact relationship between coordination and organizational effectiveness. This relationship is at the heart of the second question guiding the study. Main focus in this study is on coordination within departments. Departments are regarded as task groups structurally embedded in the organization of schools. They are responsible for (the coordination of) the instruction of specific subject areas. Research concerning departments is almost absent. As such, it is a neglected area in the field of educational research (cf. Siskin, 1991). Besides departments, attention is given to the (coordinative) role of school management and to the role of heads of department.

Data source

In this research project 107 departments, representative of both geographic region and school size, in three subject areas (history, mathematics and English) were involved. Data were collected by means of questionnaires. The teacher questionnaire covered questions concerning teacher collaboration, instructional policies, decision-making, team-consensus, cohesion and the intensity and frequency of formal and informal meetings. The head of department questionnaire included questions concerning the school management. These questions referred to the nature and extent of bureaucratic (teacher control and school wide rules governing teacher behaviour) and cultural linkages (school management - teacher communication with regard to the educational process of the department). Besides, questions were asked about the role of school management in the decision-making process. Standardized student scores on a national achievement tests in the field of mathematics were used as achievement scores. Furthermore , data with respect to relevant control variables (e.g. teacher experience, background characteristics of students) were collected.

Methods

Multiple regression analysis was used to establish the relationship between variables. A one-way analysis of variance was employed to explore the differences in the nature and extent of coordination between departments in different subject areas. A path model was developed to determine the influence of different exogenous variables (subject area, role of head of department and school management , school size) on variables concerning coordination within teams. To see whether theoretically relevant patterns of coordination in school organizations could be discerned a cluster analysis was employed. These patterns of coordination were used in a multi-level model to assess the relation between instructional coordination and student achievement. A second multi-level analysis established the relationship between student achievement and individual variables concerning coordination.

Results

The results of this study indicate that school organizations are less loosely coupled than some authors state. Especially the data concerning the way departments coordinate the instructional system lead to this conclusion. Departments employ many procedures and rules to regulate the instructional behaviour of individual teachers. These rules and regulations concern mainly the content of instruction, the nature and extent of testing, grading and the goals and outcomes of teaching. The influence of departments on these aspects of teaching in the decision-making process concerning these aspects is also considerable. On the other hand, teacher autonomy prevails within classes. Teachers are autonomous with respect to how to reach these commonly agreed upon goals and outcomes of education . However, this does not imply that within departments teachers differ to a large extent in their classroom behaviour. The data show that within departments educational views and classroom behaviour of teachers are quite similar. The results concerning the differences between departments show that the willingness of teachers to cooperate is by far the most important factor in explaining differences in coordination between departments. Aspects as communication,

instructional policies, collaboration are greatly determined by this factor. The influence of school management can be traced in the extent departments develop policies with respect to their educational process. The head of department influences the intensity and frequency of collaboration and communication within departments. Furthermore, the data show (large) differences in coordination between departments in different subject areas. This implies that within schools culturally based differences between departments exist. The results of the cluster analysis show that 3 types of school organizations can be distinguished. The first can be characterized by a lack of close internal coordination. Educational leadership, collaboration, communication between teachers and policies concerning the educational process are (almost) absent. Within the second type the instructional process is mainly coordinated mainly on the basis of collaboration and consensus. Policies concerning the educational process and educational leadership are missing. The third type can be typified as tightly coupled or bureaucratic. Main features are educational leadership and strict policies concerning the educational process at the departmental level. Less important features are communication between teachers and teacher collaboration. Results concerning student achievement make clear that schools that can be characterized as tightly coupled systems are more effective than loosely coupled schools. Responsible for this conclusion are mainly the results concerning student achievement and the individual variables concerning coordination. Variables like strong educational policies concerning the educational process and educational leadership have a positive relationship with student achievement. Both aspects refer to the fact that evaluation is possibly the crucial factor in discerning effective from ineffective schools.

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