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AUTHOR Firestone, William A.; Herriott, Robert E.
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ABSTRACT

Despite the tendency of researchers to assume all schools share a common organizational form, analysis of thirteen elementary and secondary schools provides evidence that elementary schools exhibit characteristics of the rational bureaucracy, while high schools tend to be more loosely coupled. Over 600 classroom teachers and nonadministrative professional staff members responded to questionnaires measuring four organizational dimensions: goal importance, goal consensus, centralization of influence in upper levels of the school hierarchy, and control through rules. High scores on all these measures were assumed to indicate a tendency toward rational bureaucracy and away from loose coupling. (PGD)

THE BUREAUCRATIC ELEMENTARY SCHOOL:

COMPARING TWO IMAGES OF ELEMENTARY, JUNIOR HIGH, AND HIGH SCHOOLS

William A. Firestone
Robert E. Herriott

Field Studies Component
Research and Evaluation Division
Research for Better Schools, Inc.
444 North Third Street
Philadelphia, Pennsylvania 19123

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ABSTRACT

Two competing images of schools that have attracted considerable attention are the rational bureaucracy and the anarchy or loosely coupled system. This paper operationalizes these images. High schools are found to have more characteristics of the anarchy while elementary schools correspond more to the rational bureaucracy.

THE BUREAUCRATIC ELEMENTARY SCHOOL:

COMPARING TWO IMAGES OF ELEMENTARY, JUNIOR HIGH, AND HIGH SCHOOLS[1]

The activities of researchers, practitioners, and policy makers are often shaped by their images of what schools are like as organizations.[2] However, there have been few efforts to systematize what these images imply or to identify empirically the conditions under which each image best corresponds to reality.[3] Instead, individuals tend to choose a single image and apply it to all schools.

Two competing images that have attracted considerable attention are the rational bureaucracy and the anarchy or loosely coupled system. In this paper, we explicate these images; offer some ideas on how each can be operationalized; and then apply that operationalization to a sample of thirteen elementary, junior high, and senior high schools. Current conventional wisdom seems to assume that the rational bureaucracy is valuable primarily as a normative system, and there is growing interest in the anarchy image as a better description of how all schools work. However, we find evidence that while high schools have characteristics associated with the anarchy image, the elementary schools correspond more to the rational bureaucracy.

Theoretical Perspective

Images of Schools

Two images of organizations represent the extremes among those competing for attention. The image that has most captured the thinking of practitioners and researchers in sociology and education is that of

the rational bureaucracy which derives primarily from the works of Max Weber.[4] A bureaucracy is a formally organized social structure with clearly defined patterns of activities in which, ideally, every series of actions is functionally related to the goals of the organization.[5] Corwin captures the flavor of this image by suggesting that "'rationality' results from integration between means and ends, which is produced by interdependency and firm control by enlightened administrators."[6]

In the past, researchers have found this image a fruitful source of variables for use in studying schools. Moeller developed a measure of bureaucratization of school districts that included the existence of a uniform course of study, communication through established channels, explicit statements of school policies, and clearly delimited areas of responsibility.[7] Punch developed a similar scale of bureaucratization for schools.[8] Others have developed scales for dimensions inherent in the image. Anderson, for example, developed a measure of rule enforcement, and Corwin operationalized the concepts of standardization, and rule enforcement.[9]

While researchers have been motivated to operationalize the rational bureaucratic image, they rarely take it as a literal description of schools. In fact, a great deal of attention has been devoted to showing that schools do not conform to Weber's ideal type bureaucracy.[10] Still, policy makers have been heavily influenced by this image. Some seem to take it as a useful description of the world. Wise documents how numerous state legislatures and state and federal courts seek to rationalize

education and suggests that the consequences of so doing may be dysfunctional.[11] On the other hand, recent research on "effective schools" suggests that some aspects of bureaucratization--for instance, agreement on the importance of basic skills instruction as a goal and strong centralized leadership--may increase student achievement and reduce the relationship between socioeconomic background and learning.[12] Whatever the pros and cons of bureaucratization, there seems to be an assumption among many practitioners and policy makers that if schools are not exactly rational bureaucracies, they can and should be rationalized.

The second image of schools as organizations is that of the loosely coupled system or anarchy.[13] This image was developed by researchers as a reaction to the rational bureaucracy image because of the problems encountered in applying it to real school (and other organizational) settings. In spite of several versions of this image, there is agreement on at least two themes. First, contrary to the assumptions of the rational bureaucracy, in the anarchy goals are not seen as the central mechanisms for integrating the organization and identifying the purposes for action. Weick suggests that individuals discover their goals through action and use goals as post hoc justifications for what they have done.[14] In a more political vein, Meyer and Rowan suggest that goals are adopted primarily to legitimate schools with powerful external constituencies.[15] Under these circumstances, there may be very little consensus among staff on what a school's goals actually are. Moreover, decisions will not be reached by a deductive logic, but by a "garbage can" process.[16]

Any choice situation becomes a garbage can in which problems, solutions, and decision makers with limited time and energy are mixed together. Thus, decisions are more likely to be made by oversight and avoidance than by careful analysis.

The second theme is the absence within schools of the typical means of coordination and control found in the rational bureaucracy. This is seen to be especially true with respect to decisions affecting classroom management and instruction. At best there is a zoning of control giving administrators discretion over financial and record keeping matters; but not those related to production processes.[17] Instead, instruction is "decoupled" from organizational structure, and the symbols of formal structure--organization charts, policy manuals, and curricula--are used largely to legitimate the schools to external groups.[18] Supervision and direction are not needed since educators share a "logic of confidence," a taken for granted assumption that their colleagues are carrying on their defined tasks in a responsible manner.

The anarchy image has attracted considerable recent attention among researchers. Those who formulated it believe it is a much more accurate representation of reality than the rational bureaucratic image. However, there have been few attempts to assess its accuracy empirically. While some researchers have attempted to identify means to facilitate educational change in loosely coupled systems, practitioners and policy makers have not yet made extensive use of this image.[19]

Interschool Variation

Those who discuss the relative merits of such images of schools as rational bureaucracies and anarchies tend to treat them as generic entities, as if one or the other is or ought to be applicable to all schools. Yet, variation among schools exists and suggests that each image may be more applicable to some schools than to others.

The studies that derived organizational measures from the rational bureaucratic image found important variation among schools that relate to a number of structural, leadership, student, and staff characteristics. Corwin found that standardization was positively associated with a school's size, the complexity of its organization, and the number of levels in its hierarchy.[20] Rule enforcement was associated with complexity and levels in the hierarchy. Anderson found that rule enforcement was negatively associated with the proporeion of males on the staff, teachers' experience and student socioeconomic status.[21] Punch found an association between bureaucratization and principals' leadership style.[22]

Very little attention has been paid to differences among elementary, junior high, and senior high schools. High schools are known to be more complex and have a more differentiated hierarchy of positions than elementary schools, so they might be expected to be more bureaucratic. On the other hand, the prevalence of male teachers at the secondary level might mitigate against bureaucratization.

In most past research, the possibility of exploring differences among schools at different levels is precluded by study designs that

concentrate on a single level. Among the studies exploring the rational bureaucracy image Corwin examined only high schools, Anderson only junior highs, and Punch only elementary schools.[23] The studies supporting the anarchy image have looked only at elementary schools or high schools.[24] Some studies have found significant differences in ease of implementing innovations at different levels, but have not explored the differences among levels that might help explain why successful implementation seems most prevalent in elementary schools.[25] Only one study systematically examines differences between school levels in organizational characteristics, and it is not designed to identify the relative utility of different images of schools.[26] Under these circumstances, it seems important to explore whether schools at various levels perhaps best correspond to different images.

Methodology

In the fall of 1978, we had an opportunity to begin to explore this issue as one part of an effort by Research for Better Schools to develop approaches to school improvement that the staff of state departments of education and central offices of large school districts could use to help schools implement instructional improvement efforts in specific content areas. These approaches were to be developed collaboratively with a number of schools. At the same time, a research effort was initiated to learn how school characteristics and attributes of external assistance agencies affect the change process. In the course of this

reserach, a questionnaire was designed and administered to all teachers in the collaborating schools to obtain information on relevant characteristics of each organization. Within that questionnaire were a series of items which can be used to operationalize each image. This research also provided an opportunity to explore the relationship between school level and correspondence to image.

Operationalizing the Images

A number of dimensions can be identified that distinguish between the rational bureaucratic and anarchy images, but two key differentiating dimensions have to do with the importance of goals as organizers of action and the existence of mechanisms to control individual behavior.[27] It is generally agreed that the rational bureaucracy is a goal achieving organization while an anarchy is not. Hence, one would expect more consensus on goals among staff in schools corresponding to the first image.

Organizations can have many different kinds of goals, however. Perrow identifies at least five.[28] Two of these--product goals and system goals--seem especially relevant to schools. Product goals refer to the characteristics of an organization's output, in this case its students. These might include achievement of specific literacy levels or a given sophistication in understanding differences among careers. System goals refer to states of the organization. They include growth, staff morale, and innovativeness, among others. High consensus on product and system goals can be taken as indicators of correspondence to the rational bureaucratic image while low consensus on both kinds of goals can be taken as indicators as correspondence to the anarchy image.

To measure goal consensus, teachers were given lists of twelve product goals and ten system goals and asked to choose the three most important goals on each list. The percent of professionals in each school selecting each goal as most important was used as its importance score. However, importance and consensus are not the same. In fact, maximum consensus can be achieved when either all teachers or no teachers select a given goal as most important; minimum consensus exists when half the teachers select a goal to be most important. Hence, to create consensus scores for each goal the absolute difference between the school's importance score and a score of 50 was computed and multiplied by two.[29]

The other important dimension, one that has received particular attention from sociologists, concerns means of control. Both centralization of influence in upper levels of the hierarchy and control through rules (and other impersonal mechanisms) are characteristics of the rational bureaucracy. Neither of these is thought to be effective in the anarchy.

To measure centralization of influence, professionals were given a list of twelve decision areas, and asked how much influence they had over each. The percent of professionals within each school indicating that they had no or only minor influence over each decision area was used as an indicator of centralization, and the overall centralization score was computed by averaging centralization scores across indicators.[30] High centralization was taken as an indicator of

correspondence to the rational bureaucratic image while low centralization was taken as an indicator of correspondence to the anarchy image.

To measure control of behavior through rules, professionals were given a list of seven policy areas and asked how often rules were enforced in each. One measure of control through rules was the percent of respondents in each school who said that a policy existed in a particular area and was "usually" enforced.[31] Frequent rule enforcement was taken as an indicator of correspondence to the rational bureaucratic image while infrequent enforcement is taken as an indicator of correspondence to the anarchy image.

The Sample

The context in which this research took place determined the selection of schools. The scope of the developers' activities limited the size of the sample to 13 schools, and their selection procedures ensured that it would not be random. Still, a remarkably varied set of schools were available for study. Most important, the presence of four elementary schools, six junior high or middle schools, and three high schools permitted comparison of correspondence to different images at different school levels.

The schools also differed on a number of student, staff, and environmental characteristics. For instance, enrollments ranged from less than 400 to over 3000 pupils. Minority enrollment ranged from 0% to 95%; the percent of transfers into the school during the year ranged from 2% to 18%; and the proportion of students a year or more behind in reading ranged from 2% to 95%.

Staff size also varied--from 20 to 182--and was highly correlated with pupil enrollment (Spearman r = .97). The percent of staff who are not classroom teachers, an indicator of organizational complexity, ranged from 2% to 35%, and the percent of staff with masters degrees ranged from 0% to 63%. Finally, these schools were located in rural areas, suburbs, small cities, and one of the ten largest cities in the nation. District enrollment ranged from a low of approximately 1600 to a high of over 200,000.

In sum, although the sample of schools is not random, the schools vary considerably on a number of demographic characteristics that one might expect to be associated with different patterns of internal organization. Although the sample cannot lead to definitive conclusions, it provides a useful opportunity to explore how schools correspond to different images of organizations.

In the spring of 1979, a questionnaire measuring the four dimensions described above was completed by classroom teachers and other nonadministrative professional staff members at each school. A total of 838 questionnaires were delivered to the schools for distribution. Questionnaires were anonymous. This anonymity and ongoing development work precluded followups with nonrespondents. Still, 638 questionnaires were subsequently returned in usable form, for an overall response rate of 76%.

Results

The approach employed permitted exploration of the extent to which schools correspond to the two images both on a dimension-by-dimension

basis and overall. Before exaiming the overall results, it is useful to consider two dimensions--product goals and centralization of influence--in some detail.

Product Goals

Examination of product goals indicates considerably more agreement in elementary schools on what should be taught than in junior highs and more in junior highs than in senior highs (Table 1). The asterisks in the table indicate the school level for which there is greatest consensus on the importance of each of the 12 product goals. Summing down each column, it is apparent that in general, consensus regarding product goals is greatest in elementary schools (nine of the highest consensus scores are found at that level), second greatest in junior highs (3 scores), and lowest in senior highs (no scores). Moreover, for eight of the 12 indicators, the relationship between level and consensus score is monotonic with the elementary schools scoring highest and high schools scoring lowest.

Table 1 goes about here

Consensus scores and importance scores should not be confused. In fact, agreement seems to come more by knowing what is not important than by knowing what is. The six goals on which there is highest consensus are those which are viewed as least important (Compare Tables 1 & 2). Basic skills, the goals which is seen as most important at all levels,

is seventh highest in terms of consensus. The second most important goal, respect for authority, is the one for which there is least consensus.

Table 2 goes about here

The importance data also suggest a reason why there may be more product goal consensus in elementary than in secondary schools--there are competing demands for children's time at higher grade levels. For instance, there is a decreasing, monotonic trend from elementary through junior high to senior high schools on two goals--basic skills and self esteem. The strong emphasis on basic skills in elementary schools could reflect teachers' work assignments--the fact that elementary teachers typically teach all subjects to one class and devote most of their time to basic skills instruction. Another possibility is that as children grow older, they are ready for a wider range of content materials. Both interpretations would help explain why the decreasing emphasis on basic skills continues into high school.

With five goals--critical and original thinking, work, arts and humanities, vocation education, and science and technology--there is an increasing monotonic trend to their importance across the three school levels (Table 2). These findings, too, suggest an increasing emphasis on different subject areas, more advanced cognitive functions, and more direct preparation for adult life when schools work with older students. Teachers' subject matter specialization in the upper grades could also contribute to this same pattern.

Centralization

The bureaucratization of elementary schools is as apparent when examining the data on centralization as it is with product goals (Table 3). The elementary level scores highest on nine of the twelve indicators, and on each there is a monotonic relationship running from the elementary to the senior high school level. Junior highs score highest on two indicators, and the high schools on only one. The average centralization score is highest for the elementary level and lowest for that of senior high schools.

Table 3 goes about here

Perhaps equally important, these data shed some light on the zoning of control that is said to give teachers substantial autonomy over instructional decisions and limited influence on administrative matters. Meyer and Rowan view zoning as evidence in favor of the anarchy image.[32]

Teachers report almost total control over day-to-day activities within the classroom, in particular over decisions about lesson plans and activities (Table 3, Decision 12). Control within the classroom seems to be the basis for teachers' sense of autonomy, but in other areas autonomy is limited or nonexistent. For instance, while teachers determine daily instructional activities (a centralization score of only 9.7 for "all schools" on Decision 12), they share control over course objectives (a score of 33.1) and over what textbooks will be used (44.4). Moreover, they have almost no control over salary, hiring and contract

renewal decisions. Apparently, teachers' autonomy is limited by a structure that is either negotiated or imposed by others.

In general, as the work of more people must be coordinated, as the time span of decisions increases, and as financial and personnel considerations become involved, teachers' autonomy declines. They have less influence over textbook selection--a decision with financial implications--than over selection of course objectives. Similarly they have less influence over decisions on what innovation will be adopted--another financial issue--than over the details of its implementation.

Previous studies of zoning of control have focused only on elementary schools.[33] Our data suggest that the pattern of zoning differs among elementary, junior high, and high schools. In some areas, there is substantial similarity. Regardless of school level teachers have almost no influence over personnel matters and almost total control over daily, inclass decisions. However, high school teachers appear to have substantially more influence over the decisions that affect classroom activities than do elementary teachers. The difference in amounts of influence over textbook selection, for example, is over 50 percentage points (70.0 vs. 17.3). Other large differences have to do with setting course objectives (a 42 point difference) and adding and dropping courses (24 points).

The Overall Pattern

When we turn from an indicator-by-indicator consideration of consensus on product goals and centralization of influence to a dimension-by-dimension consideration of these two dimensions in conjunction with two

others (consensus on system goals and control through formal rules), we clearly see a pattern whereby schools at the elementary level correspond most closely to the rational bureaucracy image (Table 4). Each of the four dimensions shows a monotonic trend with the elementary level scoring more like the rational bureaucracy than does the junior high level and the junior high level more than does the senior high level. When we combine the 41 indicators irrespective of dimensions, we note that elementary schools correspond most closely to the rational bureaucracy on 29 of the 41 indicators and senior high schools on only 1 (Table 4, total row).

Table 4 goes about here

Discussion

The data from this study provide a provocative, if not definitive, examination of the applicability of two images of organizations to schools and of the differences in the organization of schools ar various levels. The findings suggest that the rational bureaucratic image does have value as a descriptor of some schools. In fact, among elementary schools it appears more useful than the anarchy image. For senior high schools, however, the anarchy image seems to provide a better fit with reality. Elementary schools have more consensus on goals, are more centralized, and are more governed by universally enforced rules (at least as these are applied to staff). In sum, elementary schools are likely to be more rational and bureaucratic.

This pattern of findings is somewhat surprising. The association between complexity and bureaucratization found within school levels would lead one to expect high schools to be more bureaucratic.[34] The greater importance of personal relationships in working with younger children and the increased emphasis on universalism and achievement in the upper grades point in the same direction.[35] Indeed it has been suggested that loose coupling is a way of facilitating personal relations and providing teachers the necessary discretion to tailor instructional decisions to individual characteristics.[36]

A number of alternative formulations can be constructed to help explain these apparently anomalous findings. First, the relationship between complexity and bureaucratization may depend on the range of complexity encountered. Because of the relative paucity of specializations and the simple hierarchy of most elementary schools and the complicated departmentalization of most high schools, there is probably more variation in complexity in a study of schools at all three levels than Corwin found in his study of high schools.[37] Alternatively, the importance of complexity may depend on the interdependence among workers. Low levels of interdependence probably require less control of complex tasks than do higher levels. Consider the difference between an assembly line where interdependence is high and a shopping mall where it is low. On the line, the activities of each worker impact greatly on those of others. A mall can provide a great range of goods and services and represent a much more diverse set of specializations, but less control is needed

because of the segmentation between individual vendors. Although there is some need to articulate curricula across grade levels in schools, they are probably more like the mall than the assembly line. Moreover, the special subject matter knowledge of high school teachers may give them a kind of expertise-based influence not found among teachers in lower grades.

Third, Anderson did find a relationship between the proportion of females and rule enforcement.[38] There are certainly more women on the staffs of these elementary schools (90%) than in the junior high schools (66%) and high schools (47%). Finally, it should be noted that the measures of centralization and rule enforcement employed here apply to teachers, not students. Bureaucratization of teachers may permit de-bureaucratization for students; tight coupling in some parts of an organization may permit looser coupling elsewhere.[39] It may be that a high degree of goal consensus and the use of such indirect control mechanisms as rules, curriculum guides, and textbooks may facilitate teacher discretion by clarifying the range in which it can operate. In high schools, on the other hand, debureaucratizing staff may facilitate bureaucratization of students if only by increasing the status of teachers.

Notes

1. The preparation of this report was supported by funds from the National Institute of Education. The opinions expressed do not necessarily reflect the position or policy of NIE, and no official endorsement should be inferred.

2. W. A. Firestone, "Images of Schools and Patterns of Change," American Journal of Education 88 (1980, pp. 459-87).

3. R. G. Corwin, "Models of Educational Organizations," in Review of Research in Education 2, ed. F. N. Kerlinger (Itasca, IL: F. E. Peacock, 1974).

4. H. H. Gerth and C. W. Mills (eds.) From Max Weber: Essays in Sociology (New York: Oxford University Press, 1958).

5. R. K. Merton, Social Structure and Social Theory (New York: Free Press, 1968).

6. Corwin, "Models of Educational Organizations," p. 253.

7. G. Moeller, "Bureaucracy and Teachers' Sense of Power." School Review 72 (1964), pp. 137-57.

8. K. F. Punch "Interschool Variation in Bureaucratization." The Journal of Educational Administration, 8 (1970), pp. 124-34.

9. J. G. Anderson, Bureaucracy in Education (Baltimore: Johns Hopkins, 1968). R. G. Corwin, Militant Professionalism: A Study of Bureaucratic Conflict in High Schools (New York: John Wiley, 1979).

10. "Patterns of Organizational Control and Teacher Militancy: Theoretical Continuities in the Idea of 'Loose Coupling,'" in Research in Sociology of Education and Socialization, V. 2, ed. R. G. Corwin (Greenwich, Conn.: JAI Press, 1981).

11. A. Wise, Legislated Learning (Berkeley: University of California, 1979).

12. R. Edmunds, "Effective Schools for the Urban Poor." Educational Leadership, 37 (1979), pp. 15-23.

13. M. D. Cohen and J. G. March, Leadership and Ambiguity. (New York: McGraw-Hill, 1974). K. E. Weick, "Educational Organizations as Loosely Coupled Systems." Administrative Science Quarterly, 21 (1976), pp. 1-9.

14. Weick, "Educational Organizations as Loosely Coupled Systems."

15. J. W. Meyer and B. Rowan, "Institutionalized Organizations' Formal Structure as Myth and Ceremony," American Journal of Sociology 83 (1977), pp. 440-63.

16. Cohen and March, Leadership and Ambiguity.

17. D. C. Lortie, "The Balance of Control and Autonomy in Elementary Teaching," in The Semi-professionals and Their Organization. Ed. A. Etzioni (New York: Free Press, 1969).

18. J. W. Meyer and B. Rowan, "Notes on the Structure of Educational Organization," in Studies on Environment and Organization ed. M. Meyer (San Francisco, CA: Jossey-Bass, 1979).

19. R. Daft and S. Becker, The Innovative Organization (New Holland, NY: Elsevier, 1977).

20. Corwin, Militant Professionalism.

21. Anderson, Bureaucracy in Education.

22. Punch, "Interschool Variation."

23. Corwin, Militant Professionalism. Anderson, Bureaucracy in Education. Punch, "Interschool Variation."

24. S. Abramowitz and E. Tenenbaum, High School '77: A Survey of Public Secondary School Principals (Washington, D.C.: National Institute of Education, 1978). Lortie, "Balance of Control." J. W. Meyer, W. R. Scott, S. Cole, and J. Intili, "Instructional Dissensus and Institutional Consensus in Schools," in Studies on Environment and Organization ed. M. Meyer (San Francisco: Jossey-Bass, 1979).

25. P. W. Berman and M. W. McLaughlin, Federal Programs Supporting Educational Change, V. VII (Santa Monica, CA: Rand, 1977). S. Rosenblum, K. S. Louis, N. Brigham, and R. E. Herriott, Stability and Change: Innovation in an Educational Context (Cambridge, MA: Abt Associates, 1979).

26. B. J. Hodgkins and R. E. Herriott, "Age-grade Structure, Goals and Compliance in the School: An Organizational Analysis," Sociology of Education 43 (1970), pp. 90-105.

27. W. A. Firestone and R. E. Herriott, Images of the School: An Exploration of the Social Organization of Elementary, Junior High, and High Schools (Philadelphia: Research for Better Schools, 1980.)

28. C. E. Perrow, Organizational Analysis: A Sociological View (Belmont, CA: Wadsworth, 1970).

29. Firestone and Herriott, Images of the School.

30. Ibid.

31. Ibid.

32. Meyer and Rowan, "Notes on the Structure."

33. Lortie, "Balance of Control." Meyer and Rowan, "Notes on the Structure."

34. Corwin, Militant Professionalism.

35. T. Parsons, "The School Class as a Social System: Some of its Functions in American Society." Harvard Educational Review 24 (1959), pp. 297-318.

36. C. E. Bidwell, "The School as a Formal Organization," in Handbook of Organizations, ed. J. G. March (Chicago: Rand McNally, 1965).

37. Corwin, Militant Professionalism.

38. Anderson, Bureaucracy in Education.

39. Weick, "Educational Organizations as Loosely Coupled Systems."

Table 1

Consensus on Twelve Product Goals by School Level

PRODUCT GOAL	SCHOOL LEVEL			
	Elementary	Junior High	Senior High	All Schools
1. Science and Technology	100.0*	95.7	84.0	94.3
2. Citizenship Education	98.0*	85.7	92.0	90.9
3. Family Living	87.5	93.7*	84.0	89.5
4. Vocational Education	98.5*	85.3	82.7	88.8
5. Arts and Humanities	89.5*	86.3	84.7	86.9
6. Health and Environment	75.5	91.0*	86.0	85.1
7. Basic Skills (reading and math)	96.5*	77.0	60.0	79.1
8. Work (understanding the world of work, career education)	91.5*	66.0	48.0	69.7
9. Critical and Original Thinking	75.5*	48.7	36.7	58.5
10. Understanding Others (cultural pluralism, getting along with others)	50.5*	37.3	47.3	48.7
11. Self-esteem (self-concept)	55.5	17.7	16.0	28.9
12. Respect for Authority (discipline, character building)	18.5	25.0*	18.0	21.4
Average Consensus	77.9	67.5	61.6	70.2

*For each goal indicates the highest consensus score across the 3 school levels.

Table 2

Percent of Professional Staff Attaching Importance to Twelve Product Goals, by School Level

PRODUCT GOAL*	SCHOOL LEVEL			
	Elementary	Junior High	Senior High	All Schools
1. Basic Skills (reading and math)	98.3	88.5	80.0	89.5
2. Respect for Authority (discipline, character building)	55.8	60.5	41.0	54.5
3. Self-esteem (self-concept)	37.8	42.5	42.0	53.2
4. Understanding Others (cultural pluralism, getting along with others)	24.8	33.3	26.3	29.1
5. Critical and Original Thinking	13.3	26.7	31.7	23.2
6. Work (understanding the world of work, career education)	4.3	17.0	26.0	15.2
7. Health and Environment	12.3	4.5	7.0	7.5
8. Arts and Humanities	5.3	6.8	7.7	6.5
9. Vocational Education	0.8	7.3	8.7	5.6
10. Family Living	6.3	3.2	8.0	5.2
11. Citizenship Education	1.0	7.2	4.0	4.5
12. Science and Technology	0.0	2.2	8.0	2.8

*The twelve goals have been listed in decreasing order of overall importance.

Table 3

Centralization in Twelve Decision Areas
by School Level

DECISION AREA	SCHOOL LEVEL			
	Elementary	Junior High	Senior High	All Schools
1. Hiring New Teachers	98.5*	98.2	97.7	98.2
2. Deciding Whether to Renew a Teacher's Contract	96.8	96.8	97.7*	97.0
3. Establishing Salary Schedules	94.8	95.8*	90.7	94.3
4. Assigning Extra Duties	94.3*	91.5	85.0	90.8
5. Determining How Discretionary Funds Will be Spent	94.5*	86.7	81.7	88.3
6. Making Specific Faculty Grade Level and Course Assignments	92.3*	80.3	67.7	80.1
7. Adding or Dropping Courses	81.0*	77.5	56.7	73.0
8. Identifying Types of Educational Innovations to be Adopted	69.8*	60.3	44.0	59.
9. Selecting Required Texts and Other Materials	70.0*	39.5	17.3	44.4
10. Working Out Details for Implementing These Innovations	48.3*	40.8	36.7	42.2
11. Establishing the Objectives for Each Course	56.5*	26.8	14.3	33.1
12. Determining Daily Lesson Plans and Activities	10.0	10.2*	8.3	9.7
Average Centralization	75.6	67.0	58.2	67.6

*For each decision area, indicates the highest score across the 3 school levels.

TABLE 4

Number of Indicators Ranked Highest (Most Bureaucratic)

by Level and by Dimension

DIMENSION	SCHOOL LEVEL			
	Elem	Jr. High	Sr. High	Number of Indicators
Consensus on Product Goals	9	3	0	12
Consensus on System Goals	6	4	0	10
Centralization of Influence	9	2	1	12
Control Through Formal Rules	5	2	0	
Total	29	11	1	41

Note: The counts in the body of this table were obtained by summing number of times an asterisk appeared within the appropriate body of Tables 1 and 3 and similar tables for consensus on system goals and control through rules.