PRINCIPALS APPROACH PLANNING: THE INFLUENCE OF GENDER AND EXPERIENCE

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ABSTRACT

This study investigated principals' preferred approaches to planning. With contextual variables included as controls, the study looked at the influence of personal characteristics on support for various planning approaches. The data for the study were obtained from a questionnaire that was mailed to principals. Six hundred and fifty-one completed questionnaires were received from a sample of 1163 schools drawn from a universe of 2526 schools. The questionnaire was constructed by the researchers, with items reflecting five types of planning identified from the review of related literature. The items were piloted with 20 principals, who were asked to complete and submit the questionnaire and to provide feedback regarding poorly or ambiguously worded items. Factor analysis was used with data from the actual survey to identify five empirically based scales reflecting different approaches to planning: new technicist, traditional-consensual, organized anarchy, incremental, and reactive. Regression analysis was used to determine the influence of predictor variables on preference for the five approaches. The analysis of the relationship between the characteristics and a preference for new technicist planning resulted in the identification of outcomes of the most interest. Specifically, the larger the district the more likely the principal was to view the new technicist approach as important. Female principals rated the new technicist approach more favorably than did male principals. And the greater the percentage of their educational careers that the principals had spent as administrators, the lower they rated the new technicist approach. The findings provided the basis for several tentative conclusions: (1) female principals seemed to be attentive to the types of planning that current reform initiatives call for, (2) female principals' planning seemed to focus on the technical core of schooling, and (3) principals who had been in the role for a larger percentage of their careers seemed either circumspect or cynical about the usefulness of technical-rational planning.

INTRODUCTION

According to conventional wisdom about organizations (e.g., Fayol, 1949), planning is a necessary, or at least unavoidable, process for linking organizational ends (i.e., goals, targets, anticipated outcomes) with organizational means (i.e., resources and technical processes). Classical management theory, moreover, construes planning as an executive function, reserved primarily for those upper-level managers with the most complete view of the organization as a whole (e.g., Lauenstein, 1986; Roney, 1977). In school districts, therefore, planning has typically been viewed as a function of the superintendent and the board of education (e.g., Casey, 2005; Herman & Kaufman, 1983; Lilly, 1985).

Recent attention to school-based management, however, has shifted the burden for planning--especially for the planning of school-wide instructional improvements--to the principal (Kowalski, 1999; O'Shea, 2005). As state legislatures continue to focus attention on schools' measurable performance, principals will more often find themselves engaged in various planning efforts. School-wide improvement plans, for example, have been required for quite some time as part of accountability legislation in numerous states.

Whereas planning appears to be turning into a more prominent part of principals' jobs (e.g., Kimbrough & Burkett, 1990; Kowalski & Reitzug, 1993; O'Shea, 2005), few studies have thus far examined principals' approaches to planning. Furthermore, almost no attention has been directed to the analysis of the personal characteristics of principals or the contextual features of schools that might predispose principals to favor one approach to planning over another. There is, however, some evidence, provided in various research literatures, to support informed conjecture about the effects of certain personal and contextual characteristics on school leaders' preferences for approaches to planning. This

study construed two personal characteristics and two contextual characteristics as potentially significant. In this article, we focus attention on the personal characteristics that seemed most likely to influence principals' approaches to planning.

PRINCIPALS' INTEREST IN PLANNING

Planning may be the only effective means (Kaufman, 1972; O'Shea, 2005) for principals to address change and to provide direction for their schools, whereas failing to plan (Sybouts, 1992) puts the potential and future of the school in jeopardy. Although planning is clearly an important feature of the principal's role, it can also help members of the school community make sense of the realities of life in an educational organization (Lotto & Clark, 1986). Careful planning can, during both welcome and unwelcome change, reduce surprises and help local actors remain focused on the school aims they prize (Kimbrough & Burkett, 1990; Sybouts, 1992).

So many interests are seeking "reform" that school change is nearly inevitable everywhere (e.g., Kimbrough & Burkett, 1990). This means, ironically, therefore, that plans come and go. *Planning*, however, takes place ceaselessly. Planning not only develops a guide for action, but, among planners (including principals), it also may cultivate the disposition to organize and lead action.

School planning is necessarily more complex and contradictory in the contemporary world than it was 30 or 40 years ago. Principals and teachers are buffeted by vast, incomprehensible, and often unwanted changes (Fullan, 2001; Kowalski & Reitzug, 1993). Disputes about the content, quality, and yield of schooling provoke sharp debate within states and have become prominent national issues; the multitude of fixes and solutions have by no means produced the anticipated results (Kaufman & Herman, 1991; Tyack & Cuban, 1997); and frustration with the whole project of public schooling continues to grow. School leaders and community members often negotiate an unstable policy and social environment, and they must try to anticipate a seemingly risky future.

For these reasons (i.e., instability, hostility, seemingly intractable problems, and the consequent need to plan continuously), *the approaches that principals take to planning* are more interesting and of greater consequence than the specifics of the actual plans they develop or facilitate. This view, of course, is not the one taken by State Education Agencies (SEAs), which generally prescribe one form of planning (generally a rationalist approach) for all schools. Among the various approaches to planning (see "Methods" for consideration of these approaches), therefore, one would expect to find technical rationality asserting a preponderant influence. The interesting question is whether principals deploy additional approaches in their planning, and what background characteristics, if any, might predict the approaches they take.

The Relevance of Gender

A considerable literature documents differences in the management styles of women in contrast to those of men (e.g., Eagly & Johnson, 1990; Eagly, Karau, & Johnson, 1992; Shakeshaft, 1987). Findings, however, are contradictory. For example, various studies (e.g., Bass & Avolio, 1994; Gibson, 1995; Rosener, 1990) find women to be more attentive than men to "the human side of enterprise" (McGregor, 1960). These studies suggested that female leaders tend to base judgments more on intuitions and emotions than on rational calculations of the relationships between means and ends. Supporting almost the opposite conclusion, numerous other studies demonstrated that women tend to be somewhat more task-focused than men (Eagly et al., 1992). These findings implied that female leaders may be more focused than their male counterparts on identifying and implementing the technical processes that most effectively advance organizational goals. Adding to the complexity were studies that identify women's management styles as more democratic and participatory than those typically adopted by men (e.g., Eagly et al., 1992; Mertz & McNeely, 1997). When viewed in combination, various constellations of characteristics purported to represent the prototypical "female approach" are sometimes presented as ideally suited to the contemporary management needs of organizations in general (e.g., Aberdene & Naisbitt, 1992; Fischer, & Nelson, 1996; Helgesen, 1990) and schools in particular (e.g., Chase, 1995; Howley & Howley, 2007; Shakeshaft, 1987).

The Relevance of Experience

The adage, "the more it changes, the more it stays the same," appears to capture the viewpoint of many seasoned educators (e.g., Cuban, 1982; Duffy & Roehler, 1986). Goaded by a seemingly unending series of reform initiatives, such educators may have learned to protect their professional domain simply by offering passive resistance (e.g., Cuban, 1982; Sarason, 1971; Tyack & Cuban, 1997). Basing judgments on years of trial-and-error, these educators may be more likely than newer recruits to engage in planning that employs heuristic processes.

Less experienced educators--especially those whose professional preparation as principals has taken place recently--may, by contrast, be more responsive to pressures for change. Contemporary preparation programs, for example, devote considerable attention to the role of the principal as change agent (e.g., Geltner, 1993; Murphy, 1991). Moreover, recent initiatives in many states have been accompanied by the requirement that prospective and practicing principals receive some instruction in the use of strategic planning processes (Council of Chief State School Officers, 1996; National Policy Board for Educational Administration, 1995). These trends suggest the likelihood that less experienced principals might be more supportive of rational approaches to planning than their somewhat more skeptical elders.

METHOD

The study involved a mailed questionnaire, which asked respondents to provide information about their backgrounds and to answer questions about the planning procedures they thought were most important. In order to maximize return rate, respondents were provided with a self-addressed stamped envelope, and ten days after the original mailing, a follow-up postcard was sent as a reminder.

Sample

The sampling frame for this study was the Common Core of Data (CCD), maintained by the National Center for Education Statistics (NCES). The CCD contains basic information about every school in the nation, and is available in downloadable data sets, partitioned by state, from the NCES web site (http://www.ed.gov/NCES/ccd/index.html).

From the CCD data sets the researchers extracted Ohio and West Virginia schools located in suburban (Johnson codes 3 and 4) and rural (Johnson code 7) locales. The universe of such schools for Ohio comprised 900 suburban and 945 rural schools, and for West Virginia, 143 suburban and 538 rural schools. The total school universe for this study, then, included 1,043 suburban and 1,483 rural schools, or 2,526 total.

In order to calculate sample size, 95% was set as the confidence level and 4% as the confidence interval. In the absence of estimates of the population standard deviations for the Likert-type items on the instrument, a confidence interval (i.e., maximum allowable difference) was selected that would accommodate the worst case scenario (a 50/50 split) for dichotomous response choices. Using data sets for Ohio and West Virginia, records were extracted randomly, stratified by suburban and rural locale, except that all records coded as suburban in the West Virginia frame in the sample drawn were included, producing a 23% oversample. Even with the oversampling, however, the returned set of questionnaires from West Virginia principals included twice as many rural as suburban schools. The sample drawn included 293 rural schools and 143 suburban schools in West Virginia (N=436), and 367 rural schools and 360 suburban schools in Ohio (N=727), for a total N of 1163.

The researchers received 651 questionnaires from respondents, for an overall return rate of 56%. Returns provided 207 cases for West Virginia (157 rural, 45 suburban, and 5 with missing data on locale) and 441 cases for Ohio (219 rural, 207 suburban, and 15 with missing data on locale); 3 cases had missing data on "state."

Instrumentation

Principals' approaches to planning were evaluated, using an instrument constructed for that purpose. Because the researchers considered the construct "planning" to be markedly different from the construct "decision-making," they made the determination that an instrument such as Calabrese' (1995) *Decision*

Making Inventory or Hersey and Natemeyer's (1982) *Problem-Solving Decision-Making Style Inventory* would not adequately meet their needs. Moreover, they were unable to find either a commercially available or an experimental instrument sensitive to the distinctions in planning strategies that they were trying to address.

The researchers searched literature on planning and decision-making in order to elaborate a typology incorporating conceptually distinct approaches to planning. The analysis of the literature suggested that there was justification in dividing approaches to planning into five types, but the literature also provided evidence that distinctions among the prototypical approaches to planning were not as clear-cut as the researchers might have wished. For example, rather than constituting an approach unto itself, bounded rationality might be construed as a variation of rational planning, or it might function to bridge--or perhaps to support a productive merger between--rational and naturalistic approaches. Similarly, organized anarchy might be seen as a variation of the political approach to planning or as a type of planning distinct from it.

Expanding upon a functional typology proposed by Adams (1991), the researchers identified five types of planning. Adam's typology distinguished three types of planning--technicist, political, and consensual on a continuum from rational to interactive (or naturalistic). Like Adams, the authors took political and consensual planning to represent gradations along the interactive side of the continuum, but unlike Adams, they thought it would be important to identify gradations on the rational side as well. Moreover, there was concurrence with some authors (e.g., Krabuanrat & Phelps, 1998; Quinn, 1978), who suggested that there is a distinct form of bounded rational planning--falling somewhere between rational and interactive approaches--that constitutes an incremental, heuristic, and goal-free method of planning. Altogether the expanded continuum included two technicist approaches--the reactive approach and the technicist approach, one approach--the incremental approach--presumed to bridge the rational and interactive sides of the continuum, and two interactive approaches--the political and the consensual.

In the typology, *reactive* planning was construed as the most thoroughly rational.[1] This approach is commonly adopted by educators in response to external mandates and incentives. Reactive planning cannot properly be seen as interactive because it denies planners opportunities to shape the aims that the plan ultimately must address. Moreover, mandates provide only limited opportunities for planners to decide upon the means that they will use to address specified aims or outcomes.

From Weber forward through scientific management and systems theory, *technicist* approaches to planning have assumed that the goals of an organization are best met through the systematic analysis of relevant information and the selection of an optimizing course of action in light of that information. Recent approaches to strategic planning (e.g., Cook, 1990) elaborate procedures for systematizing rational planning processes. Strategic plans are advocated to link appropriately sequenced activities within an organization to that organization's properly warranted goals.

Bridging the rational and interactive sides of the continuum, *incremental* planning relies upon general strategies (heuristics) to address tentative and loosely specified aims, and it is substantially less ambitious than strategic planning. Incremental planning makes use of bounded rational judgments as well as heuristics derived from past experience. Heuristics incorporate both intuitions and empirically based judgments about usual associations between means and ends. Despite reliance on intuition and induction, incremental planning seeks to identify courses of action that will be effective in a technical sense. For this reason, incremental planning is more rational than either political or consensual approaches to planning. Unlike the technicist approach, the incremental approach enables planners to take tentative

1 The use of the term "rational" in this study refers to "technical rationality," which construes rationality as premeditated action to obtain the greatest gain with the least risk. Under this definition, actions that demonstrate compliance with imposed mandates appear highly rational. In theory, compliance assures that risks will be minimized and gains maximized because mandates imply certainty with regard to means-ends relationships.

actions and to reassess and revamp plans in response to feedback.

Political approaches to planning differ considerably from *consensual* approaches. Both, however, rely on personal or group interests rather than technical considerations to warrant choices about ends and means. Because political approaches respond to prevailing (and shifting) relations of power, they tend to be incremental and (at best) to represent a compromise between conflicting interests regarding ends, means, or both ends and means. Consensual approaches depend upon agreement about ends and means, but, as mentioned above, such agreement need not be based on empirical or logical evidence. Furthermore, although power is often deployed as part of consensus building, such power tends to be construed by participants as both legitimate and normative.

Instrument development

Items were developed that would be sensitive to the five types of planning discussed in the literature. In addition, items were included that related to the independent variables identified as possible predictors of principals' approaches to planning. The preliminary draft of the instrument was pilot-tested with a group of 20 principals, whose names were excluded from the universe sampled in the larger study. Principals were asked to identify items that they thought were ambiguous or poorly worded, and the instrument was revised based on their comments. In addition, each of the principals in the pilot group completed the instrument. The researchers were unable, however, to base judgments about the technical adequacy of the instrument on data from such a small sample. The determinations of the factors measured by the instrument and the reliability of scales derived from those factors were based on analysis of the data from the actual survey.

Using the 604 cases with complete data, a factor analysis was performed to identify empirically and conceptually discrete scales. Using principal components analysis with varimax rotation, five factors were extracted, together accounting for 47.2% of the total variance on the instrument. The first factor accounted for 20.1% of the variance and included items corresponding to the conceptual definition of *technicist* planning. Because the items that loaded heavily on this factor reflected recent as well as conventional conceptions of strategic planning (i.e., they attended to the idea of shared vision as well as to the aim of identifying the optimum course of action), the researchers chose the term *new technicist* as the most apt descriptor of the factor. The factor included four items with loadings > .60, suggesting that it was likely to be reliable irrespective of sample size (Stevens, 1996). To interpret the factor, all items were examined with factor loadings above .40 (Stevens, 1996). These items and their respective factor loadings are presented in Table 1.

The four additional factors--each accounting for a smaller proportion of the overall variance--paralleled the theoretical typology fairly well. The second factor, *traditional-consensual* planning, accounted for 9.5% of the variance and included items that referred to the process of developing plans on the basis of existing agreements and community expectations. With fewer than four factors loadings >.60, however, the reliability of the factor was not assured, although the large sample size did increase the likelihood of its reliability (Stevens, 1996). Four items had factor loadings >.40, and the researchers used these to interpret the factor (See Table 1.).

Although a factor relating to consensual planning was identified, the researchers did not find a factor that explicitly conceptualized planning as a political process, grounded in conflict and negotiation rather than in collaboration and agreement. The third factor corresponded best to Cohen, March, and Olsen's (1972) description of *organized anarchy*, which characterizes decision-making in some organizations. This factor accounted for 7.1% of the overall variance on the instrument. As with factor two, reliability of this factor was compromised by the fact that fewer than four items had loadings >.60, but its reliability was supported by the large sample size. The four items with loadings >.40, presented in Table 1, were used to interpret the factor.

The last two factors, *incremental* and *reactive* planning, corresponded to types of planning that were included in the theoretical typology, and accounted for 5.6 and 4.9% of the variance, respectively. Neither of these factors presented a strong case for assuming reliability despite the large sample size. In both cases factor scores above .40 were used in interpreting the underlying constructs (See Table 1.). Four items had factors loadings >.40 on the incremental planning factor, but only two items had loadings

>.40 on the reactive factor.

Table 1

Scale Items and Factor Loadings: New Technicist Scale

ITEMS	FACTOR LOADINGS
Systematically identifying strengths and weaknesses of the school.	.710
Taking steps to assure that all constituents have a common vision for the school.	.705
Setting explicit goals.	.657
Making budgeting decisions based on school goals and objectives.	.612
Responding to opportunities made available from sources outside the school.	.565
Using step-by-step procedures to determine appropriate actions.	.541
Mediating among constituencies with different views about the school's mission and goals.	.536
Involving stakeholders in brainstorming sessions to solve pressing problems.	.504
Identifying the commonalities between current problems and past problems.	.435

Scale Items and Factor Loadings: Traditional-Consensual Scale

ITEM	FACTOR LOADINGS
Identifying solutions that fit in well with community expectations.	.736
Applying solutions that worked well in the past.	.705
Using step-by-step procedures to determine appropriate actions.	.507
Solving most problems as they arise.	.468

Scale Items and Factor Loadings: Organized Anarchy Scale

ITEM	FACTOR LOADINGS
Deciding on a course of action based on partial information.	.796
Taking action in spite of ambiguity about the school or district missions and goals.	.730
Trying to second-guess the district or state.	.618
Trusting informal sources of information considerably more than formal sources.	.468

Scale Items and Factor Loadings: Incremental Scale

ITEM	FACTOR LOADINGS
Acting upon innovative ideas that arise spontaneously among staff or other stakeholders.	.680
Revising plans based on initial experiences with the implementation of a course of action.	.581
Making simple changes to improve the effectiveness of existing school programs.	.534
Identifying solutions that fit in well with the existing school culture.	.450

Scale Items and Factor Loadings: Reactive Scale

ITEM	FACTOR LOADINGS
Responding to increases or decreases in funding.	.738
Responding to external mandates.	.633

FINDINGS

Among the 651 returned surveys, quite a few provided incomplete data. The researchers used conservative procedures (e.g., listwise exclusion of cases in multiple regression analyses) to eliminate cases in which there were missing data.

Descriptive Analyses

Among the 643 respondents who disclosed their gender, 29.5% were female and 69.3% were male. Of the females, 76.6% were employed in elementary schools,[2] and 23.4% were employed in secondary schools. Of the males, 48.1% were employed in elementary schools, and 51.9% were employed in secondary schools. Overall, females were principals in only 16.1% of the secondary schools. Using the more stringent category, senior high school (i.e., highest grade = 12), the researchers found that females were principals in only 9.9% of such schools.

Chi square statistics indicated that females were significantly underrepresented in secondary schools ($p \leq .0001$) given their overall representation in the sample, but they were neither underrepresented by state (Ohio or West Virginia) nor by residence category (rural or suburban).

In order to develop an approximate gauge of the strength of principals' endorsement of the five approaches to planning, scales were constructed related to each factor. Each scale included the four items with the highest loadings on the factor, with possible scores ranging from 4 through 20. Descriptive statistics for each of the scales are provided in Table 2. As these statistics reveal, principals gave the highest ratings to *new technicist* and *incremental* planning, and they favored *organized anarchy* least of all of the approaches to planning.

Table 2

Descriptive Statistics for the Five Scales

Scale	Mean	Standard deviation	Sample size
New Technicist (sum items 3,8,10,23)	17.20	2.23	642
Incremental (sum items 5, 6, 7, 12)	16.93	1.89	642
Reactive (sum items 4,9,11,12)	16.21	1.96	641
Traditional-Consensual (sum items 14,18,19,20)	15.87	2.03	644
Organized Anarchy (sum items17,22,24,25)	10.27	2.53	630

Finally, frequency analyses were performed to identify the percent of principals who gave high ratings ($\geq$ 16) on single and multiple scales. These analyses indicated that 78% of principals gave high ratings on the *new technicist* scale, 78% gave high ratings on the *incremental* scale, 65% gave high ratings on the *reactive* scale, 58% gave high ratings on the *traditional-consensual* scale, and two percent gave high ratings on the *organized anarchy* scale. Further, this analysis showed that 35% of the principals highly endorsed at least four of the approaches to planning and that 64% highly endorsed at least three of the approaches.

2 The researchers classified principals as working in elementary schools if the highest grade level of the school was less than or equal to 6 and classified principals as working in secondary schools if the highest grade level of the school was greater than 6. This somewhat arbitrary classification was justified by the wide variety of grade configurations among schools represented in the data set.

Regression Analyses

To identify the effect of personal characteristics, including gender, on principals' rating of the various approaches to planning, each *factor score* was regressed on a combination of personal variables. In specifying the regression model, several contextual variables also were incorporated, which were inserted as controls. Table 3 provides the list of dependent and independent variables, with independent variables categorized as either personal or contextual.

Table 3

Dependent and Independent Variables

Dependent Variables	Independent Variables
	Gender (dummy, coded 0 and 1)
Factor One: New Technicist Planning	Years as an Educator
Factor Two: Traditional-Consensual Planning	Years as an Administrator
Factor Three: Organized Anarchy	% of Career as an Educator Spent in Administration
Factor Four: Incremental Planning	% of Students on Free or Reduced Lunch
Factor Five: Reactive Planning	District Enrollment (logged to reduce skew)
	School Enrollment (logged to reduce skew)
	State (dummy, coded 0 and 1)

Effects of Principals' Characteristics on Preference for the New Technicist Approach to Planning

Including both personal and contextual (i.e., control) variables, the model was statistically significant ($p < .0005$) and accounted for 8.2% of the variance among the factor scores. Only one of the control variables--district enrollment--had a significant effect. The larger the district, the more likely was the principal to view the new technicist approach as important. Table 4 presents results of the regression analysis in which the new technicist factor was included as the dependent variable.

Table 4

Regression of New Technicist Planning on Personal and Contextual Variables

Variable	*B*	*SE B*	Beta
STATE	.083	.124	.039
LN_ENR_S	-.029	.084	-.017
LN_ENR_D	.218	.050	.207***
FREE/RED	.001	.002	.025
GENDER	-.331	.097	-.149***
YEARS ED	.01	.009	.071
YEARS AD	.003	.009	.024
CAREER	-.294	.105	-.143***

*** $p \leq .001$
Adjusted r-squared = .082

With contextual controls in place, two personal variables--gender and percent of career spent in administration--also had significant effects. The partial correlation for gender was -.15, and the partial correlation for percent of career in administration was -.13. These results indicated that female principals rated the new technicist approach more favorably than male principals did. They also showed that principals, who had spent less of their careers as administrators, rated the new technicist approach more favorably than principals who had spent more of their careers as administrators. This finding, in effect, demonstrates the influence of the interaction between years of experience as an educator and years of experience as an administrator. Because it is more conceptually interpretable as a ratio than as a product, however, the interaction term was constructed in this somewhat unusual way.

Effects of Principals' Characteristics on Preference for Other Approach to Planning

The other factor scores on the same complement of personal and contextual variables were regressed and little of interest was found. Results of these analyses are included in Appendix A. Although none of the equations achieved statistical significance, gender did seem to play some role in accounting for variance in the regression of the incremental factor on the independent variables. In a simple one-way analysis of variance, the difference between males' and females' ratings of preference for incremental planning achieved statistical significance ($f = 4.6$, $p \leq .032$). The female principals more strongly endorsed incremental planning than the males did.

DISCUSSION

Gender and experience proved to exert some influence on principals' approaches to planning. Interpretation of these findings, however, requires inferences about organizational culture and the ambiguities of school leadership.

Gender

As is the case throughout the United States, male principals in our sample outnumbered females. Despite the prevalence of females certified as principals (Grady, 1989; Pavan, 1985, 1989), the sample favored males, two to one. The findings also paralleled those reported elsewhere with regard to the representation of females in secondary principalships (United States Department of Education, 1997). Indeed a very small proportion of high school principalships (i.e., fewer than 10%) in Ohio and West Virginia are filled by female administrators.

This circumstance no doubt has its basis in the history of schooling in the United States. Early on, school boards recruited unmarried women to teach in grade school classrooms (e.g., Tyack & Hansot, 1982). And at the same time, boards began to appoint men to supervise this female work force (e.g., Blackmore, 1993; Tyack & Hanson, 1982). Furthermore, since the inception of secondary education, teaching at that level has tended to be construed more as a male than as a female occupation (Shakeshaft, 1985). In the contemporary circumstance, women seem to have made some headway in gaining access to principalships, but those positions still are mostly at the elementary level.

The study, however, suggests that women's approaches to planning might serve them well in organizations--like high schools--that are conventionally seen to benefit from attention to technical core operations and consensus-building (e.g., Boston, 1982; Southern Regional Education Board, 1995). Moreover, female principals' approaches to planning seem to be more responsive than those of males to the concern of state legislatures for strategic planning on behalf of school improvement. Under conventional assumptions about the value of technical approaches, schools would do well to hire women into positions of school leadership at all levels. Several serious cautions, however, are in order.

First, evidence supporting the merits of technical rationality over other approaches to school management is by no means definitive. Important theoretical and empirical work on cultural and symbolic forms of leadership suggest that just the opposite might be the case (e.g., Cunningham & Gresso, 1993; Deal & Peterson, 1990, 1994, 1999; Sergiovanni, 1995). In fact, Sergiovanni (1995) described the ideal school leader as a "scruffy"--an educator whose rootedness in the everyday experience of school life predisposes him or her to consider tradition and practical wisdom as relevant bases for planning. Deal and Peterson (1994) noted the importance of artistry to school leadership. If cultural and symbolic leadership are indeed as important as some researchers suggest, principals who favor technical rational approaches may be the ones who are missing the mark.

A second caution concerns the possibility that females in positions of school leadership feel constraints, self-imposed perhaps, to conform to conventional expectations for their performance. Some literature, in fact, suggested that females tend to be more conforming in general than males (e.g., Eagly & Chrvala, 1986). And it is also possible that women, recognizing social constraints on their behavior, are more circumspect than men in reporting deviations from the approaches to school leadership expected of them. The findings might then reflect one of two circumstances. They might reflect the fact that female respondents were careful to frame answers to the questionnaire in ways consistent with what they believed to be expected of them. Or they might reflect the possibility that females, who are hired into principalships, tend actually to be those whose predilections fit in with the conventional view that technical solutions to school problems are both possible and desirable.

Finally, there is a need to interpret findings about the differences between male and female principals in light of the general tendency for both male and female principals in the sample to favor "new technicist" approaches over other approaches to planning. The study results suggest that principals generally endorse this conventional view of their role. Most principals in the study were unlikely to favor approaches to planning that fit in with cultural or symbolic views of leadership. Neither the approach characterized as

"traditional/consensual" nor the one characterized as "organized anarchy" seemed particularly salient to the majority of the respondents.

Experience

The researchers found that the ratio variable, percent of career spent in administration, was a significant, negatively signed predictor of the new technicist measure. Among principals in Ohio and West Virginia, the *greater* the proportion of their careers spent as principals, the *lower* they rated items on the new technicist measure. At the same time, neither total years as an educator nor total years as an administrator exhibited any unique influence on this dependent variable, and no measure of experience exerted measurable unique influence on the remaining four dependent variables. The conclusion was that only with respect to the new technicist approach to planning did the measures of experience exert any influence.

The influence of experience construed as a ratio of years as an administrator to years as an educator is rather easily conceived in quantitative terms; the greater this fraction, the lower the ratings on the new technicist measure. The interpretation is less evident, however, and several explanations of the finding are possible. Moreover, it is important to realize that the confirmed tendency exists *independent* of the tendency of women to rate the new technicist approach higher than men. That is, the following explanations would seem reasonably to relate to principals of both sexes.

One explanation seems most straightforward. On this view, educators who are experienced principals (i.e., in relation to the length of their career) become *more cynical* about the new technicist approach, possibly as a result of their familiarity with the vagaries and dodges of mandated school improvement plans. Planning of this sort promises to set any school efficiently on a relatively narrow path of school improvement. The actual experience of such planning, however, may convince principals that the required plan better serves the interests of legislators, the SEA itself, or the various special interests promoting school accountability than it serves the needs of the school, the students, or the community.

A similar view, but one that treats educators and others more charitably, would locate the cause of lower ratings on the new technicist measure, not in cynicism, but in the wise skepticism that comes with comparative experience in role. That is, with such experience, principals develop an increasing appreciation of the human side of the enterprise of schooling. Daresh and Playko (1994), for instance, found that beginning principals thought that technical skills would be most critical to their job performance, whereas experienced principals thought that skill in human relations was more important.

Both the harsher and the more charitable explanations may not take sufficiently careful account of the dynamics of principaling as a career move. Recall that the independent variable is a ratio. According to the findings in this regard, the principal with 2 years of service as a principal out of 4 years as an educator has something in common with someone who has worked as a principal for 15 of 30 years. What could such a commonality entail? The operant dynamic may constitute a change in mindset as professional attention shifts from the concerns of the classroom to the concerns of the school as a whole. Not all technical workers (e.g., teachers) can make the transition successfully to management (e.g., principals); at a minimum, most agree, the transition takes time (e.g., Daresh & Playko, 1994; Elsberry & Bishop, 1996).

Among educators, teachers have been viewed as those subject to the most directives and strictest control (e.g., Apple, 1987; Howley & Covaleskie, 1993; Hoy & Woolfolk, 1990). Teachers' routines are often prescribed, sometimes by official mandate, down to the minute (e.g., 25 minutes for reading, 35 minutes for math, and so forth). For instance, there are districts in both Ohio and West Virginia in which teachers must post their lesson plans on the doors to their classrooms. Teachers, in short, undergo a lengthy apprenticeship, if not in endorsing technical rationality, at least in submitting routinely to some of its worst indignities as manifested in the institution of schooling.

Principals almost always come from the teaching ranks. As teachers make the transition to principal, then, one might imagine that they come to see the need to slip the strictest bonds of technical rationality. Perhaps they need to make this transition in order to see the school in its entirety. Perhaps they need to give up the role of order-taker if they are to give and enforce orders. Whatever the precise case, this third

view has the appeal of suggesting what it is that a 30-year educator and a 4-year educator might have in common, that is, the experience of shedding the worst impositions of bureaucracy as they manifest themselves in classrooms. It becomes, indeed, a question of proportion and not of absolute length of experience. Someone who has been a teacher for 10 years has more to overcome than someone who was a teacher for just 2 years before becoming a principal, and it seems from the evidence that recovery may be proportional to the length of service as a teacher.

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APPENDIX A

Regression Equations That Did Not Achieve Statistical Significance

Traditional-Consensual Planning

Variable	B	*SE B*	Beta
STATE	-.335	.130	-.154
LN_ENR_S	.085	.088	.050
LN_ENRD	-.156	.052	-.147**
FREE/RED	-.002	.002	-.038
GENDER	-.028	.101	-.013
YEARS #1	-.002	.009	-.014
YEARS #2	.006	.009	.047
CAR_RAT	-.185	.110	-.089

** $p \leq .01$
Adjusted r-squared = .012

Organized Anarchy

Variable	B	*SE B*	Beta
STATE	.038	.129	.018
LN_ENR_S	-.049	.087	-.029
LN_ENRD	.046	.051	.044
FREE/RED	.003	.002	.082
GENDER	.103	.101	.046
YEARS #1	.003	.009	.021
YEARS #2	.0003	.009	.003
CAR_RAT	.150	.109	.073

Adjusted r-squared = .003

Incremental Planning

Variable	B	*SE B*	Beta
STATE	.067	.131	.031
LN_ENR_S	-.017	.089	-.010
LN_ENR_D	.070	.052	.066
FREE/RED	.0009	.002	.021
GENDER	-.205	.103	-.091*
YEARS #1	.008	.009	.055
YEARS #2	-.006	.009	-.050
CAR_RAT	.048	.111	.023

Adjusted r-squared = .001

Reactive Planning

	B	Std. Error	Beta
STATE	-.049	.130	-.023
LN_ENR_S	-.031	.088	-.019
LN_ENR_D	.007	.052	.007
FREE/RED	-.0009	.002	-.023
GENDER	-.102	.101	-.046
YEARS #1	.017	.009	.113
YEARS #2	-.017	.009	-.126
CAR_RAT	.210	.110	.102

Adjusted r-squared = .00