

# EDUCATIONAL PLANNING

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# International Society for Educational Planning

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**EDUCATIONAL PLANNING**  
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## PREFACE

Linda K. Lemasters

This volume of *Educational Planning* involved several firsts: It is the first issue of 2007; it is the first issue after the international meeting in Pittsburgh in October, 2006; and, it is the first issue to have involved guest reviewers. Once more I need to express my appreciation to Glen Earthman for his assistance with this process. He has continued to make sure that the printing and mailing are done in an effective and timely manner.

The authors for this issue have provided the journal with diverse and thought provoking research and synthesis on the topics of leadership, planning, and change. One might read those topic areas and think that we are reverting to well worn topics. What new could we possibly present on these subjects? I encourage you to read the work of our authors; they are making a contribution to the literature that is important to us as educators and to our international society. The first article begins our discussion by reporting on a study about government sponsorship and the ramifications on entrepreneurship. The study involved 140 elementary schools in Israel; the researcher hypothesized that the more a school relies on government sponsorship, the less radical its entrepreneurship will be.

The second document presents a model that focuses on providing for the personal and professional “high-touch” needs of school personnel. These are addressed within the framework of being important to key planning processes. The content of this research leads to the work of our third article on the School Improvement and Transformation System<sup>®</sup>, which was designed to address the major flaws in most reform and improvement initiatives in schools. The System is a multiple-target planning model, which facilitates school improvement by systemically and systematically transforming schools into professional learning communities by integrating the major components associated with successful school reform and improvement.

Our final article for this issue reports on a study in which the researchers investigated principals’ preferred approaches to planning. The study looked at the influence of personal characteristics on support for various planning approaches. The findings were obtained from a questionnaire that was mailed to 1163 schools drawn from a universe of 2526 schools.

I would like to thank the authors for the privilege of working with them and reading their work. They always provided prompt responses to my inquiries and were very positive about any suggestions made by the reviewers. Having such experts in the field contribute to our journal will assist us in our pursuit of making this journal a leader in literature on educational planning and regaining the status that we once new with this tome. It has been a pleasure to work with the authors and reviewers; please enjoy the product of our collective efforts.

### About the Editor

Linda Lemasters, Ed.D., is Program Advisor for the Masters/EdS in Educational Leadership and Administration, Department of Educational Leadership, Graduate School of Education and Human Develop at The George Washington University. She recently collaborated with Glen Earthman on the textbook, *School Maintenance & Renovation: Administrator Policies, Practices, and Economics* and is editor of the 2007 Yearbook for the National Council of Professors of Educational Administration.

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# GOVERNMENTAL SPONSORSHIP AS A MECHANISM RESTRICTING SCHOOL ENTREPRENEURSHIP

Ori Eyal

## ABSTRACT

*Much literature exists regarding the effect of government sponsorship on the entrepreneurial strategies employed by targeted private sector businesses. The present study expands on this literature and examines these relationships in the publicly funded school system. Based on the literature, the working hypothesis was that the more a school relies on government sponsorship (supplementary resources in the form of extra project-hours), the less radical its entrepreneurship will be. The study is based on a sample of 140 elementary schools in Israel. It was found that government sponsorship of schools creates a self-regulating selection mechanism that promotes government policies in education. Schools enjoying a significant amount of government sponsorship adopt mainly the incremental, non-deviant, "calculated entrepreneurial strategy." Only when they enjoy a moderate level of government sponsorship do schools have sufficient resources to embark on "radical entrepreneurship," because then state regulation is still unnoticed.*

## INTRODUCTION

The theoretical and empirical literature consistently attests to the effect that government sponsorship has on an organization's entrepreneurial strategy. "Sponsorship" is defined as a deliberate attempt to provide a significantly higher and more stable level of resources for target organizations, helping them out during the initial stages and increasing the likelihood of their survival (Flynn, 2000). Although businesses, nongovernmental organizations, philanthropic foundations, and universities can provide such sponsorship, government is a major player in the setting of sponsorship mechanisms. Governments that wish to enhance planned change in the economic environment employ this sponsorship mechanism. Through such sponsorship, governments intervene in the market to narrow the information asymmetries that prevent new and small business from using ordinary financial mechanisms, such as banks and venture capital funds (Felsenstein & Fleischer, 2002; Li, 2002; Lerner, 2002). By fostering a better environment for target organizations, governments can influence the rate and character of small-business entrepreneurship.

Research on government sponsorship mechanisms and entrepreneurship, both theoretical and empirical, has focused mainly on the business world. The aim of the current research is to study the relationship between government sponsorship and entrepreneurship in the public educational system. This may help us understand how government sponsorship is associated with the emergence of different entrepreneurial strategies among different publicly supported elementary schools.

## THEORY AND HYPOTHESES

### Government Sponsorship and Entrepreneurship

The importance of entrepreneurship for the economy is widely acknowledged. To aid the economy, government policy frequently seeks to assist entrepreneurship by means of sponsorship mechanisms (Li, 2002). Government intervention is supposed to cover the capital deficiencies of the free market (Felsenstein & Fleischer, 2002; Li, 2002) and provide better resources for entrepreneurship. Accordingly, government sponsorship has a significant positive correlation with the establishment of new organizations and higher rates of survival by fledgling businesses (Flynn, 2000). Moreover, government-financing programs have been associated with faster growth of companies (Lerner, 1999; 2002). Government subsidy programs serve to confirm the caliber of the entrepreneurship and thereby attract additional capital from venture financiers (Lerner, 1999; 2002). Furthermore, government subsidies exert a strong effect on the allocation of credit and favor targeted entrepreneurs (Li, 2002). It can be claimed that targeted organizations enjoy a more favorable environment and wider legitimacy and have more resources available to them (Lerner,

1989). Government sponsorship thus lowers the environmental uncertainty faced by entrepreneurial organizations.

But these benefits are limited to the early stages of a new business. In the long range, government sponsorship harms an organization's ability to adapt to its environment. Target organizations develop in an artificially enriched resource environment; their later capacity to effectively compete for scarce resources is severely undermined by the previous sponsored environment (Flynn, 2000). Flynn, extending Hannan and Freeman (1984), maintains that sponsorship constrains early learning and that this effect is reinforced by the structural inertia of organizations. Consequently, sponsored companies frequently lose their ability to go public (Lerner, 1999, 2002); but if they do so, when sponsorship either dries up or is no longer effective at buffering organizations from environmental and competitive shocks, their mortality rate rises (Flynn, 2000).

These deficiencies are usually ascribed to an inherent failure of the government selection system associated with sponsorship. Studies show that governmental selection mechanisms often makes previous subsidies the only criteria for continued sponsorship (Lerner, 2002), thereby favoring targeted organizations regardless of their effectiveness (Lerner, 2002; Li, 2002). Sponsored entrepreneurial organizations tend, therefore, to strengthen bureaucratic mechanisms that insure consistent governmental support. Thus, government selection policies have the perverse effect of punishing rapid spontaneous entrepreneurship (Baum & Singh 1994). Organizations avoid unapproved entrepreneurial activism lest they jeopardize their public funds (Lerner, 2002).

In sum, government sponsorship is substantial only in the early stages of entrepreneurial establishment. Government selection mechanisms foster self-regulating processes within targeted organizations, so that organizations favor non-deviant entrepreneurial strategies that avoid clashes with the system. It can be claimed that a high level of government sponsorship entails greater governmental control (Lerner, 1989). Government sponsorship fosters a form of institutional paternalism, which in turn increases the targeted organization's compliance with the rules of the system and constrains its corporate entrepreneurship.

### Corporate Entrepreneurship

Corporate entrepreneurship has been recognized as an organization-level phenomenon (Zahra, Karutko & Jennings, 1999). Consequently, entrepreneurship can be described as an organization's constant tendency to initiate and implement both incremental and radical innovations in its internal and external environments (Herbert & Brazeal, 1998; Kemelgor, 2002). Different corporate entrepreneurship strategies may represent the willingness and/or ability of an organization to ignore existing environmental constraints. In this sense, corporate entrepreneurship may represent different degrees of self-generation, self-directedness, and independent self-sustained action (Lumpkin & Dess, 1996).

Corporate entrepreneurship is a multidimensional phenomenon that includes a tendency towards proactivity and innovation<sup>1</sup> (Miller & Friesen, 1982; Covin, & Slevin, 1991; Slevin & Covin, 1990). Proactivity is defined as the inclination to shape the environment rather than merely react passively. It has also been defined as the willingness to initiate action to which competitors then respond. Innovation is defined as the ability to implement newly designed services and/or products. Entrepreneurship may take different shapes and characteristics, however, since these two dimensions may be found in various combinations in different organizational settings. These combinations have been given different theoretical conceptualizations in the literature, referring to different entrepreneurial orientations within a system.

The conservative orientation, represented by Covin and Slevin's "conservative organization"

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1 Three main dimensions of corporate entrepreneurship have been mentioned in the theoretical literature: proactivity, innovation, and risk-taking (Covin, & Slevin, 1991). These dimensions are also common in measurements of corporate entrepreneurship. The risk-taking dimension was omitted from current study, because its inclusion in the entrepreneurship scale may lead to measurement bias. Researchers have not found systematic correlations between risk-taking and entrepreneurial organizations; the lack of correlation suggests that this variable does not function linearly in the prediction of organizational entrepreneurship (Lumpkin & Dess, 1996; Norton & Moore, 2002).

(low proactivity and low innovativeness) (1991) or Mintzberg's "adaptive mode" strategy (moderate proactivity and low innovativeness) (1973), emphasizes stability, continuity, and maintenance of the status quo (Brazeal & Herbert, 1999; Barringer & Bluedorn, 1999).

The incremental orientation, represented by Mintzberg's "calculated entrepreneurial strategy" (moderate proactivity and moderate innovativeness) (1973), is reactive in nature and follows traditional linear models that build on historical improvements approved by the system. This orientation, however, does not dramatically alter the status quo (Bygrave & Hofer, 1991; Pavitt, 1991).

The opportunistic orientation, represented by Adizes' "arsonist entrepreneurship" (high proactivity and low innovativeness) (1985) and Eyal and Inbar's "initiating entrepreneurship" (high proactivity and moderate innovativeness) (2003), represents a "flurry" strategy in which almost any opportunity is perceived as one that should be taken advantage of (Brown, Davidsson & Wiklund, 2001; Stevenson & Jarillo, 1990). The "arsonist entrepreneurship" strategy does not lead to the implementation of ideas that may come up; the "initiating entrepreneurship" strategy can be classified as a proactive mode that promotes a trial-and-error culture, although with limited institutionalization of irregular practices.

The radical orientation is represented by the "vigorous entrepreneurial strategy" (high proactivity and high innovativeness) (Barringer & Bluedorn, 1999; Covin & Slevin, 1991; Kemelgor, 2002). This strategy features discontinuous changes and discards conventional operating practices (Brazeal & Herbert, 1999; Stringer, 2000). It represents a dramatic departure from the system's familiar practices, independently initiated within the organization (Tellis & Golder, 1996). Therefore, it could be claimed that this entrepreneurial strategy constitutes the ability to go against the current organizational structure as if it did not exist (Czariawska-Joerges & Wolff, 1991).

The different entrepreneurial strategies represent different organizational tendencies to sidestep governmental constraints. Hence the opportunity structure for school entrepreneurship should be examined in relation to the orientation of educational systems.

### Public Education Systems and Entrepreneurship

Research literature asserts that the entrepreneurial spirit driving managers to initiate, innovate, change, and influence their surroundings is visible and important in various systems, including public organizations and educational systems (Ardichvili, Cardozo, & Ray, 2003; Caruana, Ewing, & Ramaseshan, 2002; Eyal & Inbar, 2003). Even though the survival of public schools is generally assured, when schools stagnate they risk losing their relevance and legitimacy in the eyes of the society they serve, and thus their social function to alternative entrepreneurial agencies (Drucker, 1985). This threat has worsened since government acceptance of the dominance of the market paradigm spurred deregulation, privatization, and the creation of markets in the public services (Gibb, 2002; Oplatka, 2002). Entrepreneurship, therefore, should be studied as a basic mechanism that increases a school's adaptive capacity and ability to maintain its relevance in conditions of uncertainty.

Governmental control of the provision of formal education, however, may limit schools' abilities to adopt an entrepreneurial approach that ignores the system's constraints. Eyal and Inbar (2003), discussing the decentralization process experienced by the Israeli educational system, stressed that it remained centrally oriented (see also Nir, 2003) and showed that most entrepreneurship was of the nonradical types. Examples of a similar mechanism have been found in England. Boyett and Finlay (1993) reported that even under deregulation (school-based management reform) that was supposed to inspire entrepreneurial principals, government still acted as the main restraint on school entrepreneurship (Boyett, 1997). Thus, it could be argued that, although the decentralization process may put pressure on schools to act in an entrepreneurial fashion, in order to satisfy local demands (Bowe, Ball & Gold, 1992; Boyett & Finlay, 1993; Kerchner, 1988), schools must still abide by the system's standards in order to maintain their legitimacy and accordingly avoid unapproved entrepreneurial strategies. This would be the case all the more when the formulation and implementation of government sponsorship policy are centralized (Flynn, 2002), as in the case of public education.

Because public education system in Israel is funded mainly by the state, it is considered to be governmental sponsored. One major way in which government sponsors education is through the allocation of additional resources for various programs, projects, and activities that are not compulsory.



Therefore, although public schools are government-funded, schools can still be characterized by the amount of supplementary sponsorship they receive. If schools meet certain criteria, they receive extra funding, in the form of extra project hours, for teaching and administrative activities.<sup>2</sup> Schools that do not meet these criteria receive funding for the compulsory minimum only. In that sense, the sponsorship mechanism creates an authorized niche for differential school entrepreneurship. The following hypotheses follow from this background:

### *Hypothesis:*

There is a relationship between the degree of government sponsorship for a school and its entrepreneurial strategies. This means that:

Hypothesis A: Schools that receive more government sponsorship are more likely to exhibit incremental entrepreneurial strategies, characterized by intermediate levels of proactivity and innovativeness (i.e., “calculated entrepreneurship”), than are schools that receive less funding.

Hypothesis B: Schools that receive more government sponsorship are more likely to avoid radical entrepreneurial strategies, characterized by high levels of proactivity and innovativeness (i.e., “vigorous entrepreneurship”), than are schools that receive less funding.

## **METHOD**

### **Sample and Data Collection**

This study is based on a stratified random sample of 140 Israeli elementary schools located in three districts. The response rate of schools was 81%. In each school, 10 teachers were chosen at random to participate in the study. The sample included a total of 1,395 teachers—68% of them female.

The use of a stratified sample required the use of a weighted sample to prevent deviations in the estimates and in the P-values derived from the statistical tests (Levy & Lemeshow, 1991). For this purpose, the statistical analysis was carried out with SUDAAN software, which is capable of handling complex samples, and especially sampling errors and correctness of estimates in such complex samples, as well as comparisons of population groups (Thompson & Seber, 1996).

### **Measurements**

*Measurement of school entrepreneurship.* Items from the Public School Entrepreneurial Inventory (PSEI [Eyal & Inbar, 2003]) were used to measure the two dimensions of entrepreneurship—proactivity and innovativeness. The items were formatted on a seven-point Likert scale, and subjects were asked to indicate the degree to which each item described the situation in their school. Four items measured proactivity ( $\alpha = 0.86$ ); ten measured innovativeness ( $\alpha = 0.92$ ). Construct validity was tested by exploratory principal component factor analysis (Grimm & Yarnold, 1997) with direct oblimin rotation. The results of this analysis appear in Table 1. (See Table 1.)

In line with the theoretical model of entrepreneurship proposed above, two dimensions of entrepreneurship as organizational phenomena emerged in the factor analysis:

- Principal’s proactivity refers to the principal’s willingness to initiate actions within the school, i.e., actions motivated by local factors and not imposed by higher authorities.
- Organizational innovativeness is defined as the perceived quantity of innovations implemented in a school in a given time period and their impact (first- or second-degree change) on the organization.

*Constructing the entrepreneurial strategy profiles.* In order to derive the entrepreneurial strategies from the entrepreneurial dimensions—the principal’s proactivity and the school’s innovativeness—the average score assigned by the teachers for each factor was mapped to one of three categories: low, moderate, or high. For each dimension, a score

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<sup>2</sup> Extra funding units can also take the form of monetary grants. Money is a more flexible means than hours, which are earmarked for special purposes, except in cases when the money, too, is earmarked for special uses. In the case of the Israeli educational system, most funds come in the form of earmarked “hours.”

of less than 4 was categorized as low; between 4 and 5.5 was considered moderate; and above 5.5 was considered high. The choice of cutoff points is justified semantically (See also Eyal & Inbar, 2003).<sup>3</sup> The entrepreneurial strategies (profiles) were composed using the categorizations specified above for the two dimensions of organizational entrepreneurship. Theoretically, there are nine potential entrepreneurial strategies, but only four were identified in the current study.

### Measurement of Government Sponsorship

Government sponsorship level is usually measured according to the total resources spent on economic development. Government sponsorship includes change in tax structures, government subsidies, or direct allocation of resources by the state to target organizations (Li, 2003). All these sponsorship methods favor targeted organizations. In the present study, the level of government sponsorship was defined by the number of extra project-hours funded by the Ministry of Education above and beyond the compulsory minimum.

Two main government allocation processes were used to measure the level of government sponsorship: the allocation of compulsory hours and the allocation of extra project-hours.

Compulsory hours are those funded for all schools that receive public funding. These hours fall into two categories:

- Hours funded on the basis of the number of classes (i.e., grade sections).<sup>4</sup> These “hours” are used for teaching the official core curriculum, informal classroom activities, class management, and administrative tasks.
- Hours allocated according to defined parameters, such as socioeconomic index, proportion of immigrant pupils, and proportion of special-education pupils.

*Extra project-hours* are hours funded after a school has gone through a preliminary screening based on government-defined criteria. This qualifies it to receive supplementary government-funded hours. These “hours” include those to support experimental schools, “magnet schools,” or special teaching methods.

*The government sponsorship of a school* is an addition to the compulsory hours. In order to create a standard measure of government sponsorship hours, it is calculated that the percentage of government sponsorship hours vis-à-vis the school’s total number of compulsory hours. For example, if a school has 100 compulsory hours and 20 extra project-hours, it has 20% government sponsorship hours.

The government sponsorship level was calculated for each school based on the Education Ministry database. The level was broken down into three categories, using the 25th and 75th percentiles as boundaries. This procedure divided the research sample into three groups:

- (1) schools that receive little government sponsorship—equal or less than 5% extra project-hours on top of the compulsory hours;
- (2) schools that receive moderate government sponsorship—between 6% and 13% extra

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3 A semantic scale representing teachers’ agreement with the notion that the behaviors presented characterize the pattern that exists in their school accompanied the original seven-point likert scale, used in this research. Scores lower than 4, semantically represented disagreement with the notion that the behaviors (proactivity and innovation) characterized the pattern that existed in their school. All scores above 4 represent agreement that the behaviors presented characterize the school. Yet, proactivity and innovation are highly valued in society in general. Dividing the positive range of the scale reduced that bias. Thus, scores higher than 4 were divided in mid-range into two categories. Scores higher than 4 and lower than 5.5 meant that the behavior is to be found, but it cannot characterize fully the pattern of operation in the school. Scores higher than 5.5, represent strong agreement that the behaviors presented characterize the most common pattern in their school. It meant that the described behavior is happening on a regular basis at school.

4 The allocation of hours in the Israeli system was modified in 2003. From now on hours will be allocated by pupil rather than by class and most of the extra project-hours have been eliminated (Shoshani, 2003). The present study, however, was conducted before the reform took effect.

project-hours on top of the compulsory hours; and,  
(3) schools that receive a large amount of governmental sponsorship—between 14% and 40% extra project-hours on top of the compulsory hours.

## RESULTS

### Organizational Entrepreneurial Strategies

In this study, four of the proposed theoretical strategies of corporate entrepreneurship in elementary schools were identified: (a) the *conservative strategy*, combining a moderate score for principal's proactivity with a low score for organizational innovativeness; (b) the *calculated entrepreneurial strategy*, combining moderate scores for principal's proactivity and organizational innovativeness; (c) the *initiating entrepreneurial strategy*, combining a high score for principal's proactivity with a moderate score for organizational innovativeness; (d) the *vigorous entrepreneurial strategy*, combining high scores for both principal's proactivity and organizational innovativeness.

### Testing of Hypotheses

The research hypothesis was tested using a chi-square test. Table 2 shows the entrepreneurial strategy distribution according to a school's governmental sponsorship. In support of the research hypothesis, the relationship between government sponsorship and the entrepreneurial distribution was found to be statistically significant ( $\chi^2[6,140]=13.22, p < 0.05$ ). (See Table 2.)

Table 2 shows that, in keeping with hypothesis A, schools that enjoy a high level of government sponsorship exhibit a relatively high proportion of "calculated entrepreneurship" strategies as compared to schools that enjoy small and medium levels of government sponsorship. Contrary to hypothesis B, however, the proportion of "Vigorous Entrepreneurship" strategies did not have a linear relationship with the level of government sponsorship; less sponsorship did not produce more "Vigorous Entrepreneurship." Unexpectedly, the lowest frequency of "Vigorous Entrepreneurship" was found in schools with minimal government sponsorship, and the highest frequency in schools with moderate government sponsorship. This deviation from the hypothesis will be addressed in the discussion that follows.

## DISCUSSION

The current study shows that government sponsorship is expressed in the educational system the same way it is expressed in private business. A large influx of governmental resources limits the school's freedom to pursue unapproved entrepreneurial initiatives and it therefore tends to employ mostly the incremental "Calculated Entrepreneurship" strategy. But whereas there is a linear relationship between sponsorship and radical entrepreneurship in businesses, in public education the relationship is nonlinear. As mentioned, the schools with moderate sponsorship actually had a higher rate of radical "vigorous entrepreneurship" strategy than did schools with low and high sponsorship.

The resemblance between education and business with regard to the increased rate of approved entrepreneurship in strongly sponsored organizations can be ascribed to the basic selection mechanisms typically associated with sponsorship. The selection criteria function as institutional sanctions that shape the niche for school entrepreneurship. In fact, sponsorship selection mechanisms seem to go beyond setting criteria for selection and insist that sponsored schools evince full identification with the system's values. Therefore, it could be claimed that, as in business, government sponsorship of school entrepreneurship creates a self-regulating mechanism that promotes government policies.

How can we explain the fact that the schools that enjoy moderate sponsorship are more radical? Perhaps the key is that schools, unlike businesses, depend almost exclusively on government funding. This means that at low sponsorship levels, at which businesses are attracted to radical entrepreneurship strategies in order to survive, schools that lack other resources will persist in the conservative system approach. Only when they receive an intermediate level of government sponsorship do schools have sufficient resources to take initiative; because state regulation remains largely unnoticed at this level of sponsorship, there is still room for radical entrepreneurship. Higher levels of government sponsorship are accompanied by more state regulations and supervision, which cause schools to revert to incremental

entrepreneurship. It is thus reasonable that medium-level sponsorship, when additional resources exist and regulation is still low, constitutes the niche in which the radical strategy is most common.

The reason that government allows its additional resources to be applied to radical programs, at the medium level, is connected with the limited scope of such programs. At moderate levels of sponsorship, all radical initiatives remain local and influence only the school itself. With this limited budget, the radical new approach cannot be exported to other schools or districts unless the system approves it in the form of additional funding. Any attempt to expand the initiative will in fact institutionalize it—*ipso facto* reducing its radical character.

We may speculate, then, that a moderate level of government sponsorship affects the public education system in two ways. First, it creates a channel for releasing undesirable stress within the system without endangering the legitimacy of the system. Second, it enables the development of practices that facilitate the system's adaptation to its environment in a planned and controlled manner.

Nonetheless, the major paradox of government sponsorship remains: government planning mechanisms that seek to promote unique needs, through sponsorship, limit schools' ability to address those needs by means of independent and unrestricted entrepreneurship. This makes the employment of alternate, indirect government intervention strategies crucial. Such strategies, which aim at developing a regional infrastructure, can support school entrepreneurship beyond the limits set by direct government sponsorship.

This study demonstrated how government sponsorship determines the opportunity structure for school entrepreneurship. Further study is needed in order to fully understand the different opportunity structures for school entrepreneurship in centralized and decentralized educational systems. Future research should also examine how public or private sponsorship mechanisms differ from government sponsorship mechanisms in their effect on school entrepreneurship.

The conceptual framework developed in this research can provide an effective tool to help practitioners, policy makers, and planners develop, facilitate, and assess school entrepreneurship strategies that promote an adaptive, flexible, and relevant educational system that can address unique local needs.

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Table 1

## Results of the public school entrepreneurship inventory factor analysis: Direct Oblimin Rotated Factor Loading

Item	Factor 1	Factor 2
The innovations implemented in the last two years have radically changed the school.	<b>0.869</b>	-0.124
The innovations that have been implemented during the last two years have led to an overall, system-wide change in our school.	<b>0.841</b>	0.010
The innovations implemented in the last two years have caused a turnaround in our school's courses of action.	<b>0.831</b>	0.018
The innovations implemented in the last two years have led to a significant and substantial change in the guiding assumptions of our school.	<b>0.816</b>	-0.192
In the last two years a great many innovations have been implemented in our school.	<b>0.696</b>	0.218
In the last two years our school has implemented a great number of activities that did not exist previously.	<b>0.691</b>	0.167
In the last two years, our school implemented many activities that had not been tried previously.	<b>0.660</b>	0.170
A great number of innovations were implemented in our school in the last two years.	<b>0.572</b>	0.232
Innovations are a central factor in the life of our school.	<b>0.556</b>	0.306
In our school there is a tendency to implement new courses of action.	<b>0.504</b>	0.381
Our school principal exhibits great initiative qualities.	0.097	<b>0.846</b>
The school principal exhibits no initiative quality in his/her actions.	-0.108	<b>0.835</b>
The school principal has shown great initiative in the development of ideas and activities in our school.	0.147	<b>0.774</b>
Many of the activities that characterize our school are the direct result of the principal's initiative.	0.050	<b>0.723</b>

Factor 1: Organizational innovativeness

Factor 2: Principal proactiveness

Table 2

School entrepreneurial strategies distribution according to governmental sponsorship Level

Government Sponsorship Level	Frequency	Vigorous Entr.	Initiating Entr.	Calculated Entr.	Conservative Entr.	Total Schools In The Category
Small	School N	2	18	15	3	38
	School Weight	4.17	43.19	34.46	4.91	86.73
	Strategy* Weigh %	<b>4.81%</b>	<b>49.8%</b>	<b>39.73%</b>	<b>5.66%</b>	100%
Medium	School N	9	33	22	5	69
	School Weight	24.42	87.41	53.58	9.73	175.14
	Strategy Weigh %	<b>13.94%</b>	<b>49.91%</b>	<b>30.59%</b>	<b>5.56%</b>	100%
High	School N	5	10	17	1	33
	School Weight	9.46	27.63	46.98	2.89	86.96
	Strategy Weigh %	<b>10.88%</b>	<b>31.77%</b>	<b>54.02%</b>	<b>3.32%</b>	100%

\* The stratified sample methodology calls for considering strata weight in the population. Therefore, frequencies estimates are calculated according to school weight in each of the government sponsorship levels. Accordingly, school entrepreneurial strategies percentage in the category is calculated relative to total school weighted number in the category.

N = 140

Weighted N=349

School N = Schools Frequency in the Sample

School Weight = School Weight in the Category

Strategy Weigh % = Strategy Weighted % from schools in the category



# MANAGING PEOPLE, THINGS, AND IDEAS IN THE “EFFECTIVE CHANGE ZONE”: A “HIGH-TOUCH” APPROACH TO EDUCATIONAL LEADERSHIP AT THE DAWN OF THE TWENTY-FIRST CENTURY

Walter S. Polka

## ABSTRACT

*The ability to effectively manage people, things, and ideas in the change process requires that educational leaders focus on providing for the personal and professional “high-touch” needs of school personnel and utilize key planning concepts.*

## Introduction

Elementary and secondary curricula at the dawn of the twenty-first century are dynamically changing as a result of several key cultural forces including, but not limited to, the following: (a) pervasive focus on accountability, (b) omnipresent use of evolving technologies, (c) acute appreciation of the value of diversity, and (d) professional emphasis on constructivist principles (Brandt, 2000).

The ability to effectively manage those four dynamic forces, as well as others that may emerge in the future, requires that educational leaders manage their organizations in the “effective change zone.” Such leaders focus on providing for the personal and professional needs of teachers and other school personnel, as well as utilizing key planning concepts in order to promote sustainable changes.

The “effective change zone” occurs where “high-touch” interpersonal management practices, based on meeting personal and professional needs, intersect or commingle with the application of appropriate planning practices (See Figure No. 1). This “effective change zone” is similar to the “zone of proximal development” identified by Lev S. Vygotsky, as the arena where “real” learning takes place. It is at this stage of learning development that scaffolding or proactive support, by those more competent, is necessary for the learner to acquire the processes, dispositions, skills or knowledge that are being introduced (Slavin, 2003). That is similar to the concept of the “effective change zone” introduced in this article: the arena where “real” change occurs because the “high-touch” needs of the people implementing the change are being met. Transformational leaders are most efficacious in managing in the “effective change zone” because they are proactive, raise the awareness levels of followers about inspirational collective interests, and help followers achieve unusually high performance outcomes (Hoy and Miskel, 2005). They manage the issues in a systematic manner, scaffolding complex changes using simple, but sound, planning principles that can be appreciated, articulated, and internalized by all involved.

## Personal and Professional Needs of Educators Related to Change

The literature and research relating to effective change emphasize that people possess five key personal needs or dispositions that must be met for personal and/or organizational satisfaction and productivity. These needs and dispositions have been articulated in social science research and literature as the following: (a) challenge, (b) commitment, (c) control, (d) creativity, and (e) caring (Polka, 1997). Educators, also, have six professional needs or expectations that must be positively reinforced in order to facilitate their effective dealing with significant changes in their careers. These six professional needs or expectations have been identified as: (a) communication, (b) empowerment, (c) assistance in decision-making, (d) leadership, (e) opportunity for professional growth, and (f) time (Polka et al., 2000).

During the dusk of the twentieth century, social science research and literature on coping with change also reinforced that those five individual “high-touch” needs or dispositions of: (a) challenge, (b) commitment, (c) control, (d) creativity, and (e) caring were significant for organizational and personal satisfaction and productivity in a climate of pervasive flux (Polka, 1997). Accordingly, each individual must look at life as a constant “challenge” and develop the ability to see change as an opportunity, not a crisis (Csikszentmihaly, 1990). People who successfully cope with significant life changes exhibit a

strong “commitment” to themselves, their families, and their organizations (Kobasa, 1982). Individuals who believe and act as if they are in “control” and can influence the course of events in their particular lives are better prepared for change (Glasser, 1990). People who possess the “creativity” to envision optimal experiences are able to cope most effectively with change (Csikszentmihaly, 1990). And, a “caring” family attitude in the workplace plays an important role in the effective adjustment to changes (DePree, 1989). These five personal needs or dispositions for effectively coping with change were documented comprehensively using a plethora of diverse psychological research studies and were the same 5 Cs as key reference points in an American Broadcasting Company (ABC) television production titled: *The Mystery of Happiness: Who has it. . .and how to get it*, narrated by John Stossell (1992). These five “high-touch” personal dispositions have been cited as the key “hardiness factors” of the management personnel that contributed to the success of companies classified by Jim Collins, contemporary management researcher, as those companies who, “. . .have made the leap from good to great.” (Collins, 2001, p. 82).

The six professional “high-touch” needs or expectations were identified and comprehensively articulated in twentieth century educational research and literature as: (a) communication, (b) empowerment, (c) assistance in decision-making, (d) leadership, (e) opportunity for professional growth, and (f) time (Harnack, 1968). The significance of these six professional needs as related to effective educational planning activities were reconfirmed by subsequent regional (Yuhasz, 1974) and national research studies (Polka, 1977) and are integral components of the late twentieth century literature and research on the professional needs of most significance in terms of dealing with change (Beane et al., 1986; Brandt, 2000). Subsequently, leaders promulgating changes in their respective organizations must be certain that the people being impacted by those changes have: (a) the ability to know (communication) the level of concern and the quality of their thinking and feeling about the change process; (b) the ability to choose or influence (empowerment) the various aspects of the changes and/or have significant input relating to the applications of the changes in their work settings; (c) resource personnel available (assistance in decision-making) to scaffold their experiences with the changes so that they may appropriately adapt or adopt them into their real world work; (d) knowledge that their supervisors and other management personnel (leadership) who are advocating the changes are committed to the changes, accept the challenges of the changes and are focused on the outcome of implementing them; (e) comprehension of individual personal and organizational benefits (opportunities) associated with the changes that make those changes attractive to them. This awareness tends to limit their resistance to changing the way they have conducted their business in the past and positively gravitating toward the change; (f) time to reflect about the changes (time) as well as to internalize the benefits and pragmatically apply the changes in their daily operations. These six “high-touch” professional needs or expectations of people experiencing change are critical to its successful short-term implementation as well as significant to its long-term sustainability (Kotter & Cohen, 2002).

Thus, the above five personal needs or dispositions and the six professional needs or expectations have been identified as key components for organizational and personal satisfaction and productivity in diverse literature and research studies and serve as significant “high-touch” factors for the effective planning of educational reforms. This perspective is consistent with the “real change” research by John Kotter and Dan Cohen who stated, “Both thinking and feeling are essential, and both are found in successful organizations, but the heart of change is in the emotions. The flow of see-feel-change is more powerful than that of the analysis-think-change” (Kotter & Cohen, 2002, p. 2). Educational leaders must focus on the professional and personal “high-touch” needs of their respective colleagues in order to effectuate meaningful and sustainable changes.

It has been stated that, however, “Personal concerns are the most overlooked and under-managed concerns in the change process. If change is to be successful, people need to recruit the help of those around them. We need each other. That is why support groups work when people are facing changes or times of stress in their lives” (Blanchard & Warghorn, 1997, pp. 159-160). The significance of this “high-touch” focus for leaders and the imperativeness to scaffold in the “effective change zone” is further emphasized by Blanchard and Warghorn who stated, “Everyone must take responsibility for understanding the concerns that they and other people have about change, and they also must be willing to ask for what they need and be there for others in their time of need. Effective change is not

something you do to people. It is something you do with them.” (Blanchard & Warghorn, 1997, pp. 200-201). Fullan (2005) corroborated this perception by insisting that sustainable changes in education are promoted by leaders who help people find meaningful connections to each other. He stated that, “They find well-being by making progress on problems important to their peers and of benefit beyond themselves” (Fullan, 2005, p. 104). They learn from each other in the finest Vygotsky tradition, by scaffolding each other in the “effective change zone.”

## **PRINCIPLES OF EDUCATIONAL PLANNING**

Contemporary leaders must operate in the “effective change zone” and utilize planning processes that incorporate the above “high-touch” needs of educators as they are promoting changes in their educational organizations to address those contemporary factors of accountability, technology, diversity, and constructivism.

Educational planning, as a strategic process for the improvement of teaching and learning, first appeared in the educational literature of the post-World War I era (Ornstein & Hunkins, 1988). Since that time, educational leaders have utilized several different approaches in designing programs to improve teaching and learning in light of changing societal factors (Hyman, 1973; Brandt, 2000).

An educational planning framework that has effectively been utilized in the later half of the twentieth century to improve teaching and learning, however, is based on the premise that planning activities for the improvement of instruction should be designed to be: (a) cooperative, (b) comprehensive, (c) continuous, and (d) concrete (Krug, 1957). Planning for change, according to Krug, must not be done by individuals or small groups exclusively, but must be undertaken by large groups of stakeholders working in “cooperative” settings to develop implementation projects. The more people involved in the problem analysis, the better, and more sustainable the solution. The planning process itself must be “comprehensive” and consider a vast array of real and potential intervening variables (people, things, and ideas) that may impact on the implementation of change. The planning process must be viewed as a “continuous” experience that may not have a specific “end-date.” There must be continuous monitoring and adjusting of the change itself as the context continues to change. And, the planning process must produce specific artifacts or events related to the changes in order for participants in the process to have “concrete” evidence that they can identify and celebrate as the outcomes of their collective efforts.

Contemporary educational leaders need to keep this twentieth century four C planning model in mind to meet the ever-changing educational landscape of the twenty-first century. Recent studies conducted on successful change efforts reinforce Krug’s planning orientation (Fullan, 2005). The sustainability of school reform efforts, according to Fullan, is related to, “. . .continuous improvement, adaptation, and collective problem solving in the face of complex challenges that keep rising” (Fullan, 2005, p.22). This planning perspective is, also, consistent with that advocated by strategic planners such as Kaufman, Herman, and Waters who stated that,

People are complex and so are the organizations they develop and to which they contribute. If we are not to dehumanize, oversimplify and artificially make our educational world linear and restricted, it is imperative that we develop strategic plans based upon the actual realities of our organization and society--which are complex. (Kaufman, Herman & Waters, 2002, p. 109)

## **EDUCATIONAL RESEARCH RELATED TO THE PERSONAL AND PROFESSIONAL NEEDS FOR COPING WITH CHANGES**

Research conducted in New York, commencing in 1992, with a sample of two hundred and seventy-nine (279) educators, specifically identified the significance of the five personal needs and the six professional needs for the implementation of technological changes in education (Polka, 1994). Additional studies replicated that research. Three hundred and twelve (312) educators from two different samples in 1998 reconfirmed the significance of these five personal needs and six professional needs as key factors to be addressed when dealing with educational changes (Polka, et al., 2000). The results of these studies illustrated that educational leaders must not only be cognizant

of these “high-touch” needs but must directly provide for them in a hierarchical order to promote effective educational changes.

Generally, those educators surveyed divided the five personal needs or dispositions into two broad categories as follows: (a) The personal needs of most importance have consistently been identified as those of control, creativity, and caring; (b) The personal needs of moderate importance have consistently been challenge and commitment. They ranked the six professional needs into the following three distinct categories: (a) The professional needs of greatest importance have consistently been empowerment and time; (b) The professional needs of considerable importance have consistently been assistance and leadership; (c) The professional needs of moderate importance have consistently been communication and opportunity for professional growth (Polka, et al., 2000). These findings are consistent with the findings from more than twelve hundred (1200) K-12 teachers in a survey conducted in 2000 that identified the critical interpersonal relationship behaviors of educational leaders who facilitated effective school reforms (Blasé & Kirby, 2000). Subsequently, educational leaders need to recognize that there may be diverse hierarchies of these “high-touch” personal and professional needs within their respective organizations and must be prepared to provide for them in customized ways.

### **TWENTY-FIRST CENTURY EDUCATIONAL SUCCESS**

Change in education is a process, however, not an event, and is accomplished first by individuals (Hord, et al., 1987). Subsequently, the most effective educational changes, or the ones that will yield the most personal and organizational satisfaction and productivity for the professional educators involved with them, are those that occur in the “effective change zone” and reflect attention given to the five personal needs or dispositions of (a) challenge, (b) commitment, (c) control, (d) creativity, and (e) caring, as well as the six professional needs of (a) communication, (b) empowerment, (c) assistance in decision-making, (d) leadership, (e) opportunity for professional growth, and (f) time. Consequently, educational planning projects that address the four contemporary cultural forces of accountability, technology, diversity, and constructivism, as well as others that may emerge, must be introduced to educators with primary attention given to their “high-touch” needs using Krug’s 4 C model of cooperative, comprehensive, concrete, and continuous as a valuable strategic planning framework. Thus, the changes related to people, things, and ideas will be more successfully implemented and will be more sustainable because the leaders managed in the “effective change zone.”

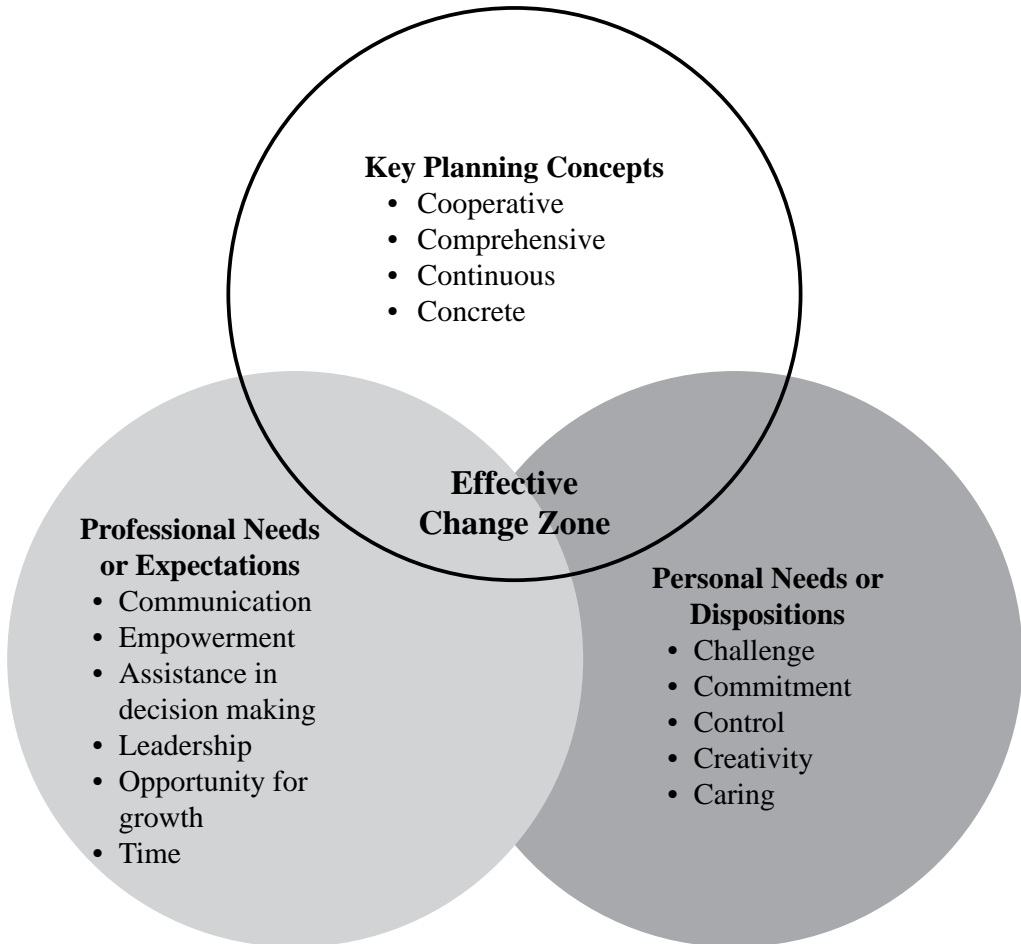
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Figure 1

Managing People, Things, and Ideas in the Effective Change Zone



# THE SCHOOL IMPROVEMENT AND TRANSFORMATION SYSTEM

Donna L. Ferrara

## ABSTRACT

*The School Improvement and Transformation System<sup>®</sup> was designed to address the major flaws in most reform and improvement initiatives in schools. The System is a multiple-target planning model, which facilitates school improvement by systemically and systematically transforming schools into professional learning communities by integrating the major components associated with successful school reform and improvement.*

*The System is grounded in the theoretical and empirical literature of leadership and educational reform and improvement. Micro, macro, and combination micro-macro components associated with school leadership, the science of teaching, and student success provide both the structure and the contents of the System. Specifically the System targets four clusters: leadership perspective, cultural aspects of the school, the technology of teaching and learning, and the technology of research and planning.*

*The System provides entry into both school leadership and the technology of teaching. The article provides not only a description of the System but also specific guidelines on the use of the System. Step-by-step guidelines and descriptions include how to scan the school to initiate the model and how to put the system into practice in a four-stage progression (introduction of the model, planning for improvement and transformation, implementation of planning targets, and institutionalizing the innovations).*

*A detailed example of how to implement the System is described in the article. How the System contributes to cultural transformation and the development of a professional learning community is addressed. Some comments are offered on implications for planning and practice; such comments address many planning and practice issues that can impact the successful implementation of the model if issues are not addressed during the planning and implementation of the improvement changes.*

## **A Multiple-Target Planning Model to Facilitate School Improvement**

When reformers set out to improve schools, they often face many challenges, some of them unforeseen. One challenge that presents itself early is the scope that reforms should take: Should the reforms be “sweeping,” or should practitioners target specific improvements?

Often, in the name of expediency, educators elect to apply discrete solutions, believing that the sum of the “discrete” solutions will not only improve the school but correct systemic problems as well. Sometimes, the solution is perceived to be a simple importing of a specific program or approach. What educators often fail to consider is that improving a school is far more complex than simply addressing one or several individual problems.

Deficiencies in school functioning or in student learning or performance are seldom merely the result of a single weakness in the organization of the school or in poor instructional programming in a particular area of learning. Rather, deficiencies in school or student performance or in school and student outcomes often serve as indicators of systemic weakness--horizontally, vertically, and interactively--in leadership, in characteristics of the culture, in programming, in the choices of instructional methods and approaches across the learning environment, and in decision making at all levels of the school and the instructional program.

There are many reasons for educators to approach complex problems with simplistic solutions: lack of time, lack of resources, a lack of knowledge regarding school dynamics, undeveloped competencies to deal with the complexity of the dynamics in schools, among other things. But perhaps more than anything, what is absent in schools today is a knowledge base for school leaders that will lead to the practice of forms of leadership that shape school culture (Deal & Peterson, 1999), facilitate dealing with complex school issues, and link leadership capacity and leadership competencies with school reform.

What has complicated the issue for educators is that the field until recently has lacked (a) substantive research illuminating the role and technical work of leadership in sweeping school reform and (b)

guidance regarding how to integrate multiple cultural, planning, professional, and technical factors that are critical to the success of reform and school improvement efforts.

This article addresses the dilemmas presented above by presenting a model designed to incorporate and integrate research-based components associated with effective and successful school reform practices. The article begins with a short discussion of recent work in the field of leadership, which will serve as a foundation to the model presented.

## **THE CONTRIBUTION OF LEADERSHIP TO SCHOOL IMPROVEMENT AND TRANSFORMATION**

Leadership has been propelled to the forefront once again in conversations about school improvement. Leadership is regarded as critical to current reform agendas. Principal leadership, in particular, is of great interest and concern inasmuch as principal leadership is critical in developing and sustaining school-level conditions that are essential for instructional improvement (Hallinger & Heck, 1996).

A survey of more recent leadership research reveals that the research community is responding to the call from scholars to refocus scholarship in the field of educational administration. Consequently, a new body of research is investigating more discrete aspects in the field of educational administration and leadership (Spillane, 2004). Researchers are now identifying and addressing such topics as (a) leadership for instructional improvement from a distributed perspective, (b) systemic leadership, which takes into account how leadership is distributed both vertically and horizontally, (c) the contents of what leaders need to know about the teaching and learning of specific school subjects in order to enhance their practice as instructional leaders, (d) the mechanisms by which leadership changes and transitions during change and reform initiatives (Spillane, 2004), and (e) how local school leaders construct conditions for professional community in their schools.

Recent findings from the leadership literature suggested that reform efforts must apply systemic and systematic approaches; integrate multiple components within the school; link and integrate critical functions; promote a climate and culture for learning; build capacity, systems of practice, and professional community; provide opportunities for distributing leadership; and, accommodate, guide, and refine the indirect and direct influence that both administrators and teachers contribute to school improvement.

## **WHAT DOES WORK IN EDUCATIONAL REFORM AND IMPROVEMENT?**

Specific programs do not address the multi-layered needs in schools nor systemic weakness. Difficulties in successfully attending to school reform emanate from the failure to utilize an ongoing, holistic, interactive, and recursive process that will incorporate dynamic elements in a school. Employing such a process is critical as the historically loosely coupled nature of schools makes it difficult to establish in a linear manner how elements do or do not interface (Weick, 1979).

While educators must address both micro and macro issues in the school setting, they often fail to enter interventions through a macro *system* before proceeding to address specific weaknesses in the school setting or in the instructional program. They also fail to employ strategies that can *transform* the system. In effect, current educators must now discover meaningful ways of *coupling* the many components and functions across the school learning environment that will promote continuous learning, growth, and improvement.

The work is conducted blindly if the system as a whole is not first addressed. The blueprint for school reform and improvement will be more successful if it contains the following: (a) a macro system that incorporates known variables that are associated with effective school practices and exemplary school results; (b) a micro system that delineates specific indices for exploration; (c) guidelines regarding how to manage the macro system; (d) guidelines regarding how to manage the micro components of the system; (e) guidelines regarding activities that will permit full exploration of the micro components of the system; and (f) systematic checks and balances that will take into account how addressing or adjusting one micro aspect will influence other micro or macro components.

The School Improvement and Transformation System<sup>®</sup> (SITS) accommodates these requirements, providing a means to study and redesign schools systemically and systematically, with the ultimate goal of transforming the culture of the school into a professional learning community that creates continuous



learning opportunities, promotes dialogue and inquiry, encourages collaboration and team learning, establishes systems to capture and share learning, empowers people towards a collective vision, connects the organization to its environment, and constructs a “leader model” culture, in which leaders model, champion, and support learning (Marsick & Watkins, 1994).

### **THE SCHOOL IMPROVEMENT AND TRANSFORMATION SYSTEM®**

The School Improvement and Transformation System is predicated on integrating micro, macro, and combination micro-macro components that researchers and practitioners have identified as being related to school and student success.

The SITS specifically targets four clusters that serve as theoretical and empirical foundations for successful reform in schools: leadership perspective, cultural aspects, the technology of teaching and learning, and the technology of research and planning. (See Note at end for definitions and discussion of the terms “technology of teaching and learning” and “technology of research and planning.”)

Through the use of the SITS as an improvement tool and model, components of the four clusters (see Figure 1) are addressed directly in design, planning, and implementation (e.g., leadership culture, standards setting curriculum, pedagogy) or evolve into normative practices (e.g., collaborative and collegial practices, data-based and research-based decision making).

Figure 1

Clusters associated with School Improvement and Transformation Efforts®

➤ **CLUSTER 1 - LEADERSHIP PERSPECTIVE**

- Leadership**
- Vision**
- Mission**
- Shared Leadership**
- Distributed Leadership**

➤ **CLUSTER 2 - CULTURAL ASPECTS**

- Culture**
- Climate**
- Morale**
- Collaborative Norms and Practices**
- Collegial Norms and Practices**
- The Professional Learning Environment**
- The School as a Professional Learning Community**

➤ **CLUSTER 3 - THE TECHNOLOGY OF TEACHING AND LEARNING**

- Standards Setting**
- Curriculum**
- Pedagogy**
- Professional Development**
- Classroom Management**

➤ **CLUSTER 4 - THE TECHNOLOGY OF RESEARCH AND PLANNING**

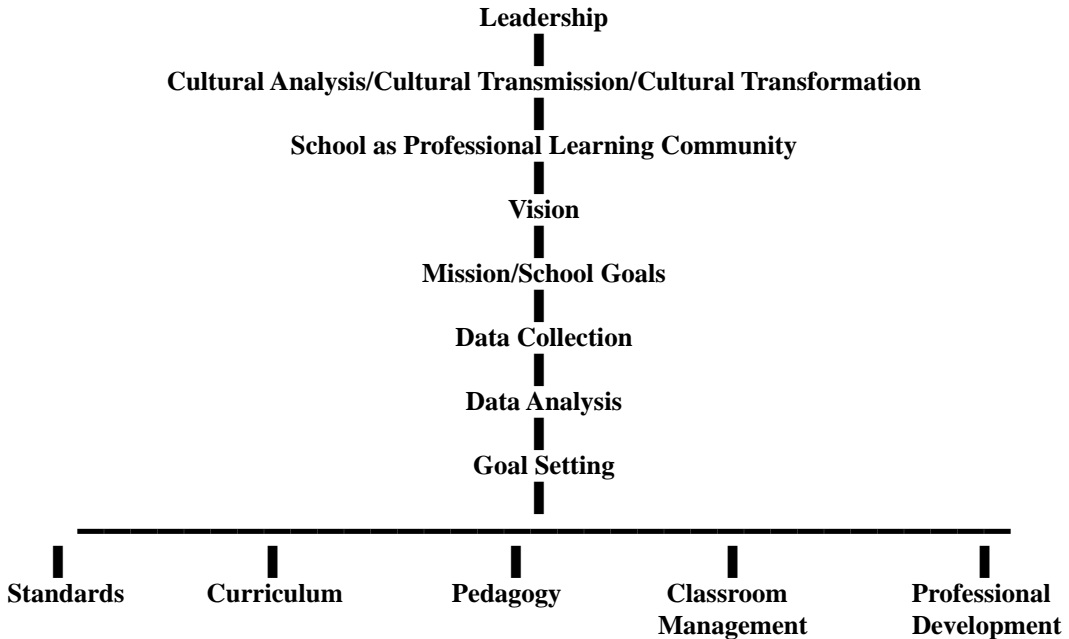
- Data-based Decision Making**
- Research-based Decision Making**
- Assessment and Evaluation**
- Systems Approaches**
- Systematic Approaches**
- Integrated Short-term and Long-term Planning**

The system is represented in its simplest form on one vertical and one horizontal plane (See Figure 2). The vertical plane represents visionary, cultural, strategic, organizational, and operational aspects of the school. The horizontal plane represents those components that are at the heart of the technology and renewal of teaching and learning, both for the student and for the teacher or instructional support staff.

The improvement and transformation initiative is entered at the top of the vertical axis and proceeds down the axis somewhat methodically. In time, the horizontal axis becomes the technical work for which instructional staff will largely be responsible, with movement generally from left to right. All aspects of the two axes are assessed for their present condition. If at all possible, the vertical axis is assessed before work begins across the horizontal axis.

Figure 2

The School Improvement and Transformation System



**PRELIMINARY SCANNING TO INITIATE THE SCHOOL IMPROVEMENT AND TRANSFORMATION SYSTEM®**

A series of preliminary investigations should be initiated, which assist in determining the status of the school (See Figure 3 at the end of the document).

Because this assessment includes multiple factors, school personnel should schedule the time necessary to facilitate the careful and thoughtful collection of information and identification of areas that require addressing in the school. This process might take as long as half an academic year.

For the vertical axis, school educators would need to investigate the following:

1. What is the quality of leadership in the school? Does it contribute to the growth and health of the school?
2. What is the climate of the culture? Does it support learning and growth, for all involved in the school enterprise?
3. Does the school have the attributes of a professional learning community, as identified in the research literature?
4. Have the governing bodies articulated a vision for the school?
5. Is there a written mission for the school that is posted throughout the building, publicized, and celebrated?
6. Are there written school goals?
7. Are data collection and data analysis used systematically and systemically for making school decisions?
8. Is there annual and ongoing goal setting across the school environment that is the result of systematic data analysis and review?

For the horizontal axis, the following should be investigated:

1. Do written standards for content and student performance exist? Has data analysis been used to identify and clarify student needs prior to creation of instructional and performance objectives? Are all standards, benchmarks, objectives, and outcomes aligned with State/National Standards and other mandated learning and assessment requirements?
2. Do curriculum documents exist for all content or subject areas? Is the curriculum based

- on research and best practice? Has the curriculum been aligned with written content and performance standards, appropriately based on State and/or National Standards? Has the curriculum been aligned with written instructional and performance objectives? Are assessment and evaluation conducted on a regular basis? Are the results of regular assessment and evaluation analyzed, reported, studied, and looped back to facilitate continuing review and improvement of the curriculum?
3. Is the pedagogy of delivering the curriculum based on research and best practice? Have the pedagogical practices been aligned appropriately with the curriculum? Do pedagogical practices reflect a multiple and mixed methods orientation? Are assessment and evaluation results looped back to continuing review and improvement of pedagogy?
  4. Is there a plan for professional development of administrators and instructional staff? Are professional development practices based on research and best practice? Is professional development aligned with the curriculum and the pedagogical practices currently in use? Is professional development provided when new curricula or pedagogical practices are implemented? Are assessment and evaluation of professional development plans conducted on a regular basis; is this information analyzed and looped back to continuing review and improvement of professional development?
  5. Is there a management plan in place for management of students at both school-wide and classroom levels? Is the plan based on research and best practice? Are the school-level and classroom-level plans developmentally, cognitively, demographically, and socially appropriate? Are assessment and evaluation of school and classroom management plans conducted on a regular basis; is this information analyzed and looped back to continuing review and improvement of school and classroom management practices?

### **PUTTING THE SYSTEM INTO PRACTICE**

Operationally, the system is organized around four stages: introduction, planning and design, implementation, and institutionalization (See Figure 4 at the end of the document).

Stage One comprises Introduction of the model, with activities that focus on staff and faculty development; a preliminary scan of the components on the two axis of the School Improvement and Transformation System at the level of the school system and the individual school; preliminary identification of strengths, weaknesses, and gaps relative to each of the components on the two axes; development of system-wide and school vision and mission statements, and development of goals for schooling; and, if such vision and mission statements and goals exist, revision as necessary.

Stage Two, Planning and Design, contains phases that focus on comprehensive data collection and reporting, specification of targets for intervention (e.g., leadership, climate, curriculum, professional development, etc.), research relative to each of the targets, design of improvement plans, design of a professional development plan that supports later implementation of improvement plans, and design of an integrated model for assessing and evaluating both improvement and professional development plans. Within each of these phases, discrete activities are conducted. For example, one activity of the comprehensive data collection and reporting phase is location of existing data. Another activity is organization, mapping, and analysis of relevant data. A third is study of the data by Study Teams.

Stage Three involves the review and implementation of plans and the activating of a monitoring system that includes assessment and evaluation of the processes used within the School Improvement and Transformation System as well as the educational results that were expected based on using the SITS.

Stage Four, Institutionalization, includes developing plans for ongoing review of the system and the schools, including review of effectiveness of leadership, quality of the culture, and evidence of the school as a professional learning community; setting up teams to oversee the review process and to make recommendations based on the ongoing review of process and outcomes data; generating and disseminating of semi-annual reports with recommendations; and updating of improvement and professional development plans and assessment and evaluation tools as needed.

This four-stage approach is not new. It is congruent with earlier work that promoted a multi-stage

learning approach to organizational development and organizational change (Fullan, 1982; Lewin, 1951).

The work of putting the system into practice is accomplished by setting up one steering committee at the school level and individual task forces or study teams. The steering committee should comprise one member of each task force, preferably the task force chair. The steering committee, which should include at the very least members of administration, teachers, instructional support staff, and parents, serves as a conduit for review of various investigations, develops the charges of the task forces, documents all deliberations, and integrates the work, findings, and recommendations of the task forces. If a district contains multiple schools, as is often the case in American schools, a district level committee also should be set up so that work across schools can be monitored to make certain that there is desired congruence across same-level schools and articulation between and among levels of schooling.

The steering committee will undertake an initial “scan” of the categories to determine the status quo: strengths, weaknesses, impediments, and so forth, sharing this information with the task forces. The steering committee members can be charged with studying the components on the vertical axis and communicating this information with the task forces.

All major categories represented on the horizontal plan should undergo an in-depth assessment by the task forces. The charge to the task forces will include: (a) preparing a status report of their component, including strengths and weakness; committees must report the source of identification of strengths and weaknesses (testing data, teacher observation, etc.); (b) reporting identified practices in the school that appear to be positively contributing to successful results; (c) reporting practices that appear to have a neutral effect on successful results; (d) reporting practices that may in fact be negatively impacting student outcomes; and (e) reporting practices that may be contributing to the overall “ill health” of the school culture.

Identifying weaknesses, strengths, and gaps in the system is data-driven, conducted using the tools of research, including investigations of educational literature, questionnaires, focus group interviews, and other tools of assessment and evaluation. Data also are studied to determine whether any given identified weakness is an anomaly, occurring only once or uncommonly, or a persistent and/or systemic problem. Such an action-research approach facilitates gathering multiple sets of information, therefore enhancing the quality of decisions (French & Bell, 1999).

Once needs have been identified, needs are prioritized by the steering committee. The steering committee also considers what overlaps may exist between and among needs so that addressing one need might in fact be addressing other needs. The steering committee shares these findings with the task forces and asks the task forces to prepare their recommendations for addressing the needs that they have identified. Task forces are asked to seek solutions that will address the integrated nature of learning and the overlapping needs that have previously been identified. Communication between and among the various tasks forces is critical, as the recommendations of one task force will have an impact on the recommendations of another, given the interrelated nature of what occurs in the planning and delivery of the instructional program.

Recommendations for addressing the problems are formulated by the various task forces and reviewed by the steering committee. The steering committee then develops a proposal to determine what initiatives will be undertaken, taking into account resources as well as attempting to minimize impediments that might impact adoption and implementation of interventions. The proposal is reviewed by the various task forces, feedback is sought, and the plans are refined and adopted. The professional development plan is created. Finally, an integrated model to assess and evaluate both improvement plans and the professional development plan is developed.

The SITS puts a large emphasis on the Planning and Design stage. For this reason, one academic year should be set aside for the Introduction and Planning and Design Stages. The work of implementation and activation of the monitoring systems should begin no sooner than the beginning of the second year. In fact, if a considerable amount of standards-setting and curriculum development must be undertaken, there may be some overlap of implementation of some targets and continuing work on other targets. (It is to be understood that more recently standards have been primarily dictated by State and/or National guidelines/requirements.)

## **DETAILED EXAMPLE OF HOW TO IMPLEMENT THE SCHOOL IMPROVEMENT AND TRANSFORMATION SYSTEM**

For the purposes of this discussion, this description of how to implement the SITS is set at the school level. The initiative is presented to all interested stakeholder groups. Separate awareness presentations are made to: (a) administration, faculty, and instructional support staff, (b) non-instructional support staff, and (c) parents and community. Volunteers are solicited from the faculty and instructional support staff for five task forces: standards, curriculum, pedagogy, classroom management, and professional development. The interactive nature of these five components is stressed.

Before the work of the steering committee and tasks forces is undertaken, it is critical that administration identify personnel who have expertise in the tools of research and best practice. These people will need to be strategically placed within the framework of the initiative or might be organized as a sixth task force.

Once task forces have been organized, the steering committee is organized. Membership should include representatives from administration, teaching staff, instructional support staff, the chair of the five task forces, and one or two parent and/or community representatives. The steering committee should not exceed 12-15 people. Other than the chair of the task forces who serves to link deliberations and communications, personnel should not sit on both the steering committee and a task force.

A preliminary scan of the system, using the SITS, is conducted by the steering committee, with initial identification of obvious strengths, weaknesses, and gaps. (See Preliminary Scanning to Initiate the School Improvement and Transformation System above.)

If vision and mission statements and goals for schooling do not exist or require updating, administration should determine how these will be addressed. To save time, these activities can be conducted simultaneously with the location of all existing data and necessary documentation that will inform future deliberations. Also, at the same time, the steering committee can begin its work in dealing with the components on the vertical axis of the SITS: (a) determining the quality of leadership and its congruence to renewal and transformation of the school; (b) investigating the quality of the culture, communication systems within the culture, what might hamper transformation of the culture; (c) determining whether the school already has the attributes of a professional learning community; if not, what kinds of activities might need to be conducted in order to begin development of the school as a professional learning community; (d) providing assistance with data collection; and (e) assigning the responsibility of data collection and analysis to qualified school personnel. If no one within the system has data analysis and interpretation skills, the school must determine how these capacities will be acquired.

The next step involves comprehensive analysis of relevant data by the task forces to determine where students are lacking in their performance and outcomes and the possible sources of those problems. Task forces should meet among themselves, from left to right on the axis (see Figure 2): the standards task force should meet with the curriculum and the pedagogy task force to determine if there are gaps between the standards, the curriculum, and pedagogy. Classroom management and professional development planning can occur at a later time.

Task forces specify targets for intervention and then prioritize those targets. This information is reviewed by the steering committee.

The steering committee looks for links between and among the findings of the task forces. If necessary, the steering committee can meet with the task forces for any clarification that might be necessary. The steering committee then sends recommendations with comments to the task forces.

Recommendations are reviewed with all stakeholders, and the work of designing interventions begins. Interventions are chosen carefully by the task forces, based on rigorous research, and taking into account the needs of the children in the individual school. Task forces must provide data-driven and research-based rationales for the choices that they have made. These recommendations are forwarded to the steering committee for review and acceptance. Plans are documented.

Implementing plans can then begin. Improvement plans should be written for 3-5 years. Classroom management is now addressed: (a) Does the school have written plans? (b) Has instructional or non-instructional staff demonstrated weakness in this area? (c) Are current practices congruent with

the vision, mission, goals, and instructional program of the school? This is an appropriate time to develop school-level and classroom-level management plans if they do not exist. Such plans should be congruent with vision, mission, and school goals statements. Plans also should reflect current thinking that puts emphasis on positive learning environments, meeting students' needs, and developing internal motivation (Erwin, 2003; Marzano, 2003). Professional development plans are designed around the needs reflected in the improvement plans and any other needs identified during planning and design activities. Appropriate professional development is designed and conducted.

Once plans are implemented, the phase of institutionalization begins, including development of written plans for ongoing monitoring and review of initiatives and preparation and dissemination of progress reports.

What should be obvious even to the most casual reader is that the SITS places great emphasis on planning and design activities.

### **HOW THE SYSTEM CONTRIBUTES TO CULTURAL TRANSFORMATION AND THE DEVELOPMENT OF A PROFESSIONAL LEARNING COMMUNITY**

There are culturally transformative results from an approach such as the SITS that is ongoing, systemic, and systematic. First, the school is treated as a system whose parts function interdependently. Second, diagnosing the “ills” of the school or school district is accomplished systematically, not randomly or haphazardly. Third, administrative and teacher leadership and participation are central to all initiatives. Fourth, all initiatives are accomplished through collaborative partnering and sharing of solutions, as well as appropriate distributing of leadership throughout the school (Elmore, 2004). Fifth, educators focus their work and “learning” on needs related to the educational program and the culture of the school. Sixth, decision making is driven by continuous cycles of assessment and evaluation based on phases of data and information gathering and of review that facilitate decision making, planning, and oversight. Seventh, accountability is imbedded in the process of improvement as administrators and instructional staff take responsibility for student learning (Reeves, 2004). And finally, and perhaps most importantly, the SITS provides a mechanism for imbedding transformative practices into the culture, therefore transforming the culture itself. In this way, a true professional learning community is created.

Such a system also targets critical school components that cannot be ignored in school reform, improvement, and transformation efforts. A systems approach provides a mechanism through which a school can actually be *transformed* by providing a balanced systemic-systematic lens through which one views school dynamics. The model accommodates much of the current literature that establishes how to transform schools by using research-based approaches (see Lambert, 2003; Marzano, 2003a; Zmuda, Kuklis, & Kline, 2004).

### **WHAT APPEARS TO BE MISSING IN THE SITS: INCORPORATING OTHER KNOWN FACTORS OF STUDENT AND SCHOOL SUCCESS**

While some factors that are cited in the literature today as contributing to school and student success are not represented in the model, these become incorporated in the design phase. For example, parental and community involvement and the home environment are not among the components specified in the design. Administrators can find opportunities for inviting the involvement of parents and community in participation in school activities as well as in decision making and planning. Through curricula that are sensitive to the role of parents and the community relative to the developing child, teachers can incorporate lessons, activities, and practices that involve parent and community participation and invite parents and community to contribute resources that enhance the instructional program.

### **IMPLICATIONS FOR PLANNING**

The SITS Model presents multiple and critical implications related to planning. First, administrators must gain a thorough understanding of the model, study and share research that will facilitate deep understanding of the model, identify within the organization capacity factors that will enhance implementing the model and factors that will serve as obstacles to implementation, seek outside consultation and support, and serve as proponents for the multiple layers of change that will comprise the

comprehensive improvement effort. Administrators also must identify at initial stages school personnel who may be able to assume critical leadership and support functions.

Secondly, administrators must be willing to commit the time necessary to accomplish such fundamental change; they must also be committed to “staying the course.” Administrators must communicate to all constituents that implementation of the improvement and transformation plan is a long-term commitment.

Thirdly, planning must be transformed into a function that is integral to everyday life in the school, not just a function that is relegated to the beginning or the end of school years. Planning becomes one of the hallmarks of regular operation, evolving into a normative practice.

Fourth, planning must be approached not as a linear task but as an interactive and a recursive one that links all school functions and creates a new reality and a new mode of professional practice for school personnel.

Fifth, planning must be carefully coordinated with communication functions within the school. Planning must be transparent and frequently communicated to school personnel and constituency groups outside the school.

Finally, the planning function within the school must be sufficiently flexible to adjust itself to accommodate changes that occur within the school or are the result of changes in the policies of governing bodies or changes in the external environment.

### **IMPLICATIONS FOR PRACTICE**

First, those initially charged with introducing the model and guiding preliminary stages must have both concrete and conceptual understandings of the nature of the model: what the model is designed to accomplish, the inter-related nature of the model, the complexity of the model, and the reasons why such a model has advantages over approaches that target specific organizational weaknesses that emerge over time.

Secondly, the school must work towards its development as a professional learning community (Wald & Castleberry, 2002), while simultaneously addressing the multiple components that will ultimately produce a school that is transforming and improving itself, as well as improving educational outcomes for students.

Third, the model is dependent upon a professional instructional staff that is central to the transformation of the culture and to the practice and attainment of organizational improvement. While the principal has an integral role and carries out integral functions in transformation and improvement, transformation is equally dependent on the cooperative and sustained interactions between and among instructional staff and administrative staff as well as dependent on integrative modes of thinking and performance.

Finally, all practices must continuously be scrutinized, assessed, and evaluated to determine if they are positively contributing to established goals, objectives, and targets. Assessment should be ongoing, relatively frequent, multi-faceted, and use multiple measures. Targets should be assessed both formatively and summatively. Assessment efforts must have a built-in flexibility that allows for adjustments in practice within reasonable time frames when desired results do not reach acceptable expectations or standards.

### **A FINAL WORD**

While this paper has not directly confronted the political context of school environments today--either nationally or internationally, the SITS does provide a framework that (a) encourages local leaders and instructional staff to embrace responsibility and accountability for local results; (b) addresses the need to infuse district-level and school-based planning, participation, support, responsibility, and accountability into initiatives; and (c) nurtures and protects opportunities for local decision making.

As a transformation and improvement design, the SITS provides a framework that can serve as a buffer against individual and group political influence that can derail and/or paralyze improvement efforts. While political influence is exercised and negotiated, predominantly by school leaders, the influence is one that channels and focuses energies on building a sustainable professional community



through cultural transformation and integration of institutional structures and functions that support the improvement of teaching and learning.

#### Note

The terms “technology of teaching and learning” and “technology of research and planning” are used in this article to denote technical aspects that are research-based and associated with successful practice within each cluster. As most educators understand it, the term “technology” in its generic sense refers to: (a) any technical means that people use to enhance the application of knowledge in order to meet goals, (b) the process of applying established knowledge to meet identified needs, and (c) the practical application of science and scientific methods in school practice. Research has been consistently clear that there is a science of teaching and learning and that certain “technical” practices are positively related to effective schools.

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Figure 3

**SCHOOL IMPROVEMENT AND TRANSFORMATION SYSTEM<sup>®</sup>**

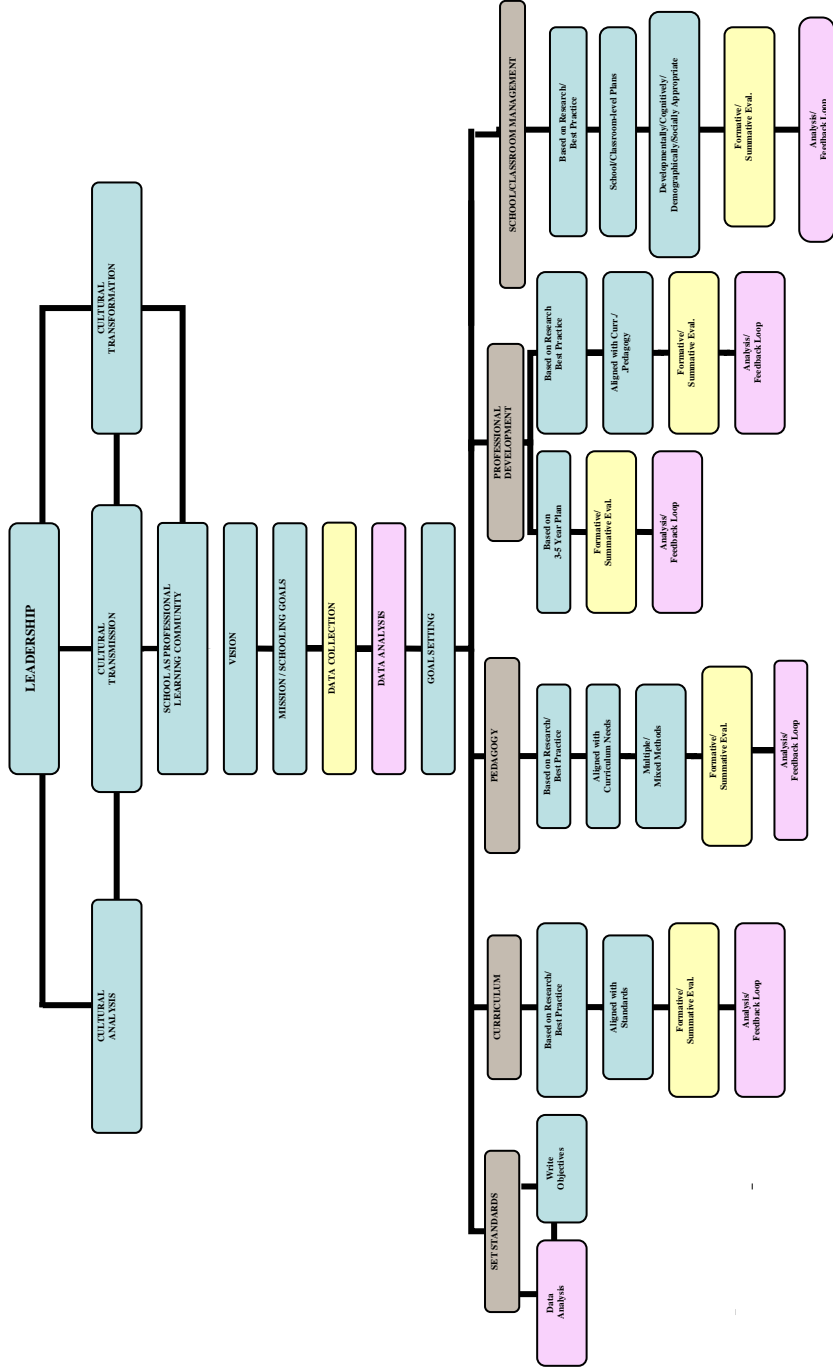
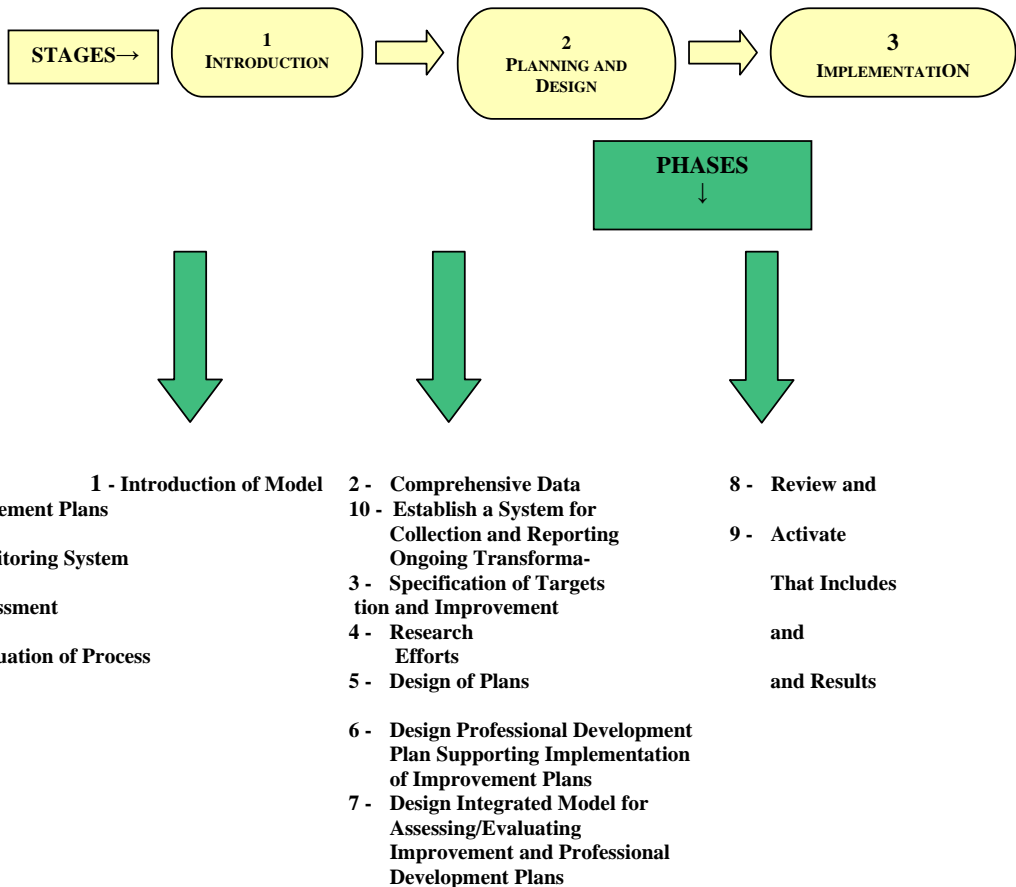


Figure 4

Stages and Phases of School Improvement and Transformation Process©



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# PRINCIPALS APPROACH PLANNING: THE INFLUENCE OF GENDER AND EXPERIENCE

Aimee Howley  
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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.<sup>1</sup> 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

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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 Technician Scale

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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

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Scale Items and Factor Loadings: Traditional-Consensual Scale

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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

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### 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,<sup>2</sup> 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 technician* 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 Technician (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 items 17,22,24,25)	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 technician* 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.

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<sup>2</sup> 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 Technician Planning on Personal and Contextual Variables

Variable	<i>B</i>	<i>SE B</i>	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 technician approach more favorably than male principals did. They also showed that principals, who had spent less of their careers as administrators, rated the new technician 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 & Chryala, 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

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