

Goal-Based Learning and the Future of Performance Management

All levels of government have begun to pursue results-based reforms, which assume that managers will use performance information to make better decisions. However, reforms have neglected the insights of a large and relevant literature on organizational learning. This article revisits this literature, treating results-based reform as an organizational learning mechanism and a deliberate structural effort to induce learning. From an organizational learning perspective, most results-based reforms target narrow process improvement (single-loop learning) rather than a broad understanding of policy choices and effectiveness (double-loop learning), even though the latter is more critical for long-term organizational success. Case evidence from state governments illustrates single- and double-loop learning and the importance of two frequently neglected aspects of organizational learning: learning forums—routines where performance information is deliberately examined—and the role of organizational culture in enabling or limiting learning.

Recent efforts to make government more results-oriented have been well documented (Melkers and Willoughby 1998; Snell and Grooters 2001). A common element of such reforms—whether they are known as performance-based budgeting, performance management, or managing for results (MFR)—is the regular collection and dissemination of performance data. Similar reforms have struggled in the past: The underlying assumptions of rational decision systems proved unrealistic, and the habitual and passing nature of reforms increasingly bred cynicism among public employees (Downs and Larkey 1986; Wildavsky 1975). Some observers suggest the current wave of reform faces a similar fate. Reforms have occurred without the additional, necessary changes to organizational structure and environment (Schick 2001). Meeting MFR reporting requirements can become a control mechanism for demanding compliance from agencies rather than a tool for improvement (Franklin 2000). At the federal level, the Government Accountability Office (formerly the General Accounting Office) reported that as the Government Performance and Results Act was implemented between 1997 and 2000, the percentage of managers using performance information *declined* significantly (GAO 2001, 29–38).

What can help the current wave of MFR reforms to avoid failure? The organizational learning literature can help to identify and remedy the problems of managing for results.¹

The key assumption that underpins MFR is essentially a learning theory: Decision makers will learn from performance information, and, in turn, they will make better-informed decisions and improve government performance. However, MFR has failed to incorporate many of the lessons about how learning occurs in organizations. This article revisits this literature, applying it to case studies of MFR efforts in the state governments of Virginia and Vermont to develop useful insights into performance management. First, this literature distinguishes two types of learning. Most MFR efforts are targeted toward narrow process improvement (single-loop learning) rather than broad understanding of policy choices and effectiveness (double-loop learning), even though the latter is critical for long-term organizational success. Second, this literature distinguishes cultural and structural approaches to learning. The learning literature would classify MFR reforms as a structural approach that is likely to struggle until it incorporates cultural aspects into learning forums.

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Linking Organizational Learning Theory to Managing for Results

Argyris and Schön present two types of learning that may occur in organizations. Single-loop learning is “instrumental learning that leads to improvement in the performance of organizational tasks,” that “changes strategies of actions or assumptions underlying strategies in ways that leave the values of a theory unchanged” (1996, 20). In the context of governance, single-loop learning is appropriate for routine, repetitive operations, where public-sector goals are clear and widely accepted. In terms of managing for results, it implies specifying goals to the point where they are measurable; tracking the achievement of goals; and judging these results in the context of a point of comparison, whether it be pre-set targets, previous performance, the performance of other organizations, or other parts of the same organization. Such comparison prompts a dialogue that analyzes the factors and processes that underpin performance and how they might be changed. In short, single-loop learning allows organizations to do the same things better.

Double-loop learning is “learning that results in a change in the values of theory-in-use, as well as in its strategies and assumptions.... Strategies and assumptions may change concurrently with, or as a consequence of, change in values” (Argyris and Schön 1996, 21). In the context of governance, double-loop learning occurs when public actors test and change the basic assumptions that underpin their mission and key policies. It is more relevant for complex, nonprogrammable issues that are important to the organization’s survival rather than short-term efficiency. Double-loop learning means questioning the goals of a program and asking whether the program is worth pursuing—or worth pursuing in the public sector. In the context of managing for results, it implies a willingness to revisit the basic organizational mission, goals, and strategies on a regular basis.

The organizational learning literature emphasizes the importance of organizational culture to learning (Schein 1992). Learning is based on shared experiences, norms, and understandings that foster intelligent behavior (Senge 1990). Characteristics of a learning culture include high employee empowerment, participation, and discretion (Argyris and Schön 1996; Fiol and Lyles 1985).² Lipshitz, Popper, and Oz (1996) criticize the abstract nature of this cultural approach to learning. They argue that learning can be better studied and promoted by undertaking a structural approach, which they call *organizational learning mechanisms*: “institutionalized structural and procedural arrangements that allow organizations to systematically collect, analyze, store, disseminate, and use information that is relevant to the effectiveness of the organization” (293). While

a cultural approach emphasizes creating shared and functional norms among workers, the structural approach denotes a reliance on formal rules and procedures to enable learning.

The structural approach to learning is attractive to reformers because structure and procedure are aspects of an organization that can be changed through formal mandates. A structural approach is also consistent with rational-analytic theories of learning that emphasize collecting, storing, and distributing data (Mahler 1997). It is clear that managing for results, as it is currently being implemented, is closer to the structural rather than the cultural approach to learning. The structure comes from legislative and administrative mandates that create formal rules and procedures to generate, collect, and disseminate data (Radin 1998; Snell and Grooters 2001). Strategic plans are created to specify goals, and data are measured and collected to describe performance. Program and agency data are usually generated and reported in a process that closely resembles—and is often part of—annual budget reporting procedures to central agencies. For good measure, the data are likely to be verified by an independent auditor. All such performance information is typically published in governmentwide and agency documents.

The types of mandates described above largely ignore the role that organizational culture plays in enabling the use of performance data. The procedural nature of such mandates is reinforced by recommendations from professional bodies for greater performance reporting—the Government Accounting Standards Board, the National Academy of Public Administration, and the National Council of State Legislatures have all issued such calls. And performance-reporting mandates make sense to elected officials: They are clear and specific reforms that elected officials can adopt to demonstrate they care about results-based government. In contrast, cultural reform is slow, difficult, hard to observe, and largely shaped at the agency level (Wilson 1989).

A focus on structure is not the only characteristic shared by organizational learning mechanisms and managing for results. Both approaches share the assumption that information forms the basis for improved decision making. Both rely on systems theory for a logical account of how information is converted into decisions (Senge 1990; Moynihan and Ingraham 2003). Both assume that routines of information collection and dissemination are followed by routines of information use. Studies of MFR efforts in state government question whether such routines of performance information use occur. The Government Performance Project surveyed MFR practices of all state governments during 1998 and 2000 and found that almost all states had advanced strategic planning and performance-measurement procedures that had produced a lot of performance infor-

mation. However, evidence of actual use of this information was anecdotal rather than systemic (Ingraham and Moynihan 2001). The weakness of most state MFR systems, therefore, lies between the points of dissemination of the data (which is done well) and use (the ultimate purpose, which is done poorly). These findings appear to be replicated at the federal level (GAO 2001).

The gap between dissemination and use occurs partly because of an absence of routines in which data are examined and interpreted—learning forums. Learning forums are routines that encourage actors to closely examine information, consider its significance, and decide how it will affect future action. Such routines are unlikely to occur as an organic reaction to the simple provision of quantitative information. Managers prefer to spend their time interacting with people and collecting oral data, not contemplating quantitative data (Mintzberg 1975).

Leavitt and March (1990) point to routines as the critical lever by which behavior can be adjusted. However, whether and how organizational actors decide to create and participate in routines depends on what they consider appropriate to their organization. This returns us to the issue of culture: Actors will learn if they have the information to learn, but also if the organizational culture portrays routines of data consideration as appropriate organizational behavior. The Government Accountability Office recently tied the success of results-based management to creating “an evaluation culture through commitment to self examination and learning” (GAO 2003, 3). Even if learning routines can be established, the way that actors value, assess, and interpret information will be shaped by cultural biases (Mahler 1997). Structural approaches that ignore cultural aspects, as most MFR mandates and systems appear to do, are weakened.

There are other ways that culture and structure interact. The organizational learning literature sees high employee empowerment, participation, and discretion as conducive to learning. In contrast, punishment-oriented control systems tend to discourage learning and lead to defensive reactions (Argyris and Schön 1996). Centralized structures reinforce past behaviors and make new learning more difficult. The public sector has traditionally relied on centralized controls on behavior, human and financial resources, and decision making, leading to goal displacement, trained incapacity, and a decline in creativity and effectiveness (Klay 1994; Merton 1940; Osborne and Gaebler 1992). Even with the introduction of new rules and procedures designed to facilitate learning, failure to remove the old rules will thwart change (Mahler 1997). Hedberg (1981) points to the need to “unlearn” past behaviors before new learning can take place. The ability to unlearn is most at risk when old cognitive frameworks contradict new lessons to be learned. Evidence suggests that, although state

governments have enthusiastically implemented strategic planning and performance measurement, they have been much slower to remove central controls on financial and human resources (Brudney, Hebert, and Wright 1999; Moynihan forthcoming). Forrester and Adams (1997) point to the need for public management reforms to foster more flexible and empowering organizations if they are to lead to organizational learning.

Managing for results has neglected another key aspect of the organizational learning field: the possibility of double-loop learning. Single-loop learning appears to be the only type of learning promoted in the MFR model that is recommended to practitioners and realized in mandates: Bureaucrats will figure out ways to achieve organizational goals more efficiently rather than challenge these goals (Barnow 1992; Liner et al. 2001, 91–96, 99–135). The policy-making aspect of strategic planning is rarely discussed, and it can be conveniently overlooked if we assume that bureaucrats use the process only to clarify, not to challenge, preexisting goals, and that new goals will be adopted at the behest of elected officials and stakeholders. Occasionally there is an acknowledgement that data can contribute to double-loop learning, but this usually occurs in such narrow terms—should government be charged with providing a service, or is it provided more cheaply by another sector?—that it does not appear to be a substantial departure from single-loop learning.

What explains this oversight? To a large degree it reflects the constraints of normative assumptions about decision making in the public sector, that is, the hoary politics–administration dichotomy. As a reform, managing for results harkens back to the concept of the neutral administrator, who seeks to implement the goals they are given by elected officials most efficiently. Managing for results certainly does not promise to empower bureaucrats with policy-making authority or to question the nature of the goals they pursue (Koteen 1989). While the dichotomy has suffered many a battering, no reform has ever enhanced its potential for adoption by explicitly rejecting its existence. The widespread success of MFR reforms is partly the result of a willingness to reaffirm the dichotomy and to overlook how MFR may violate it.

The dichotomy is reinforced by the normative assumptions of public choice, a theory that is associated with results-based government (Boston 1991). Public choice sees managing for results as a means by which elected officials can reassert control over administrators by setting goals in the strategic planning stage and closely overseeing outputs. If double-loop learning is to occur at all, it is the province of elected officials, not bureaucrats. However, the logic of the public-choice perspective questions whether any such learning can occur: Elected officials are motivated to win reelection, and therefore they will seek to change strategic

goals to match shifting public preferences, not because of information about program performance.

Single-Loop Learning in Virginia

Here I analyze case studies to illustrate the problems and possibility of learning in the context of managing for results. I selected three state governments regarded as high, middle, and low performers in MFR—Virginia, Vermont, and Alabama, respectively.³ The case outcomes described in this article are based on fieldwork and analysis undertaken in 2001, although in each state it was necessary to establish a narrative of at least a decade to understand how these outcomes occurred. In each state I examined the statewide and agency procedures for MFR and the role of performance information in decision making. I controlled for function by focusing on corrections. Alabama’s MFR process was weakened by a lack of resources and support, and it provided little evidence that MFR had led to any type of useful learning. Therefore, I discuss Alabama only to the extent that it provides inferences about the failure to induce learning, and focus the analysis instead on Virginia and Vermont. The characteristics and case outcomes for these two states are summarized in table 1.

Virginia is a state that is widely regarded as a national leader in managing for results (GAO 1994). It has pioneered the use of a public Web site to maintain voluminous amounts of agency performance information. For all of the sophistication of the statewide performance information system, interviewees conceded that for budget and other policy decisions, performance information was rarely an influential factor—a finding that is true of Alabama and Vermont also. Statewide actors lack the time, interest, incentive, or functional expertise to examine the very specific data emerging from agencies. If performance information provides relevant information on a politically important program, it may be considered, but largely to support preexisting policy positions. Not only is there too much information for statewide decision makers to use, there is not enough of it to substitute for function-specific

knowledge and experience. Learning that improves service quality, efficiency, and effectiveness can occur only at the agency level, among those who are familiar with organizational processes and can understand the outputs a process will deliver (Bennett and Hill 2002).

Does managing for results promote single-loop learning at the agency level? All three states had established performance-information systems to provide the data necessary for such learning. All three corrections departments had strategic goals and matching performance targets; all reported actual performance on a regular basis. However, there is little evidence that they regularly evaluated this knowledge in the search for improved alternative organizational processes, thereby crystallizing the lessons of single-loop learning. Virginia made the greatest progress, but a common weakness in all three states was their failure to develop regular learning forums among target users of performance data.

The Department of Corrections in Virginia provides the strongest example of learning forums that led to the evaluation and use of performance information. A series of 1996 strategic planning meetings among senior managers was used to draw attention to critical organizational issues. Performance information first drew attention to issues, but it also provided a metric by which to judge and compare alternative processes. Staff embarked on what they referred to as benchmarking exercises, creating teams that searched for ways to deal with these issues from other organizations regarded as national leaders, or from their own employees. The experience resulted in changed practices in the critical areas, changes that the department’s managers regarded as successful in terms of cost and performance.

MFR did promote single-loop learning in Virginia. However, it is also clear there was a deliberate and largely successful effort to foster MFR not just through a series of planning and reporting procedures, but also through building a results-oriented organizational culture. Department leadership decided to institutionalize MFR and other organizational-improvement techniques through a revitalized management-training program. Managers reported the

Table 1 Case Characteristics and Outcomes

Case outcomes	Virginia	Vermont
Single-loop learning	Occurred in a number of instances and among a variety of organizational actors	Occurred to a limited degree, but without frequency
Double-loop learning	Did not occur	Occurred among agency leadership, which successfully promoted dramatic policy change
View of managing for results	Management tool to promote and demonstrate performance improvement	Learning metaphor to understand and communicate policy choices and outcomes
Learning forums	Used throughout the organization, as in benchmarking teams; promoted by managing for results requirements, but without formal routine or structure; focus on process change	Used infrequently by high-level actors for major strategic decisions (strategic visioning) and annually for programmatic decisions
Role of culture	Tied performance improvement to creating an employee-centered, mission-based culture	Open and experimental culture among leadership; challenged institutional culture of staff
Major challenge	Further formalizing of performance-improvement efforts	Gaining buy-in from institutional staff on new policy goals

training helped to reshape the organizational culture by leading to a shared ethos of organizational improvement and a willingness to examine existing procedures to seek more effective ways of doing things. Frequently, the changes that resulted did not employ rigorous benchmarking of cost and performance data, but were based on the logical advantages of a new procedure and the experience and reputation of the source of the innovation. The 125 most senior managers continued to meet once a year, sharing stories about organizational successes in achieving strategic goals, and institutional staff report to monthly meetings where performance data is discussed. On an informal basis, employees find time to share ideas, and they report that suggestions are frequently adopted as organizational standard operating procedures.

Such learning forums foster process change through the dissemination of innovations, taking advantage of the knowledge of the change agent and the audience. Such knowledge is difficult to encode into a purely quantitative benchmarking exercise, which might neglect implicit standards that employees are constantly aware of, such as staff safety. The change agent is likely to have experimented with different options before settling on the one that he or she regards as innovative enough to promote. The recipients also have a knowledge base that allows them to consider how an innovation will fit into their organizational environment.

The ethos of performance improvement was also fostered by two other decisions made during the 1996 strategic planning meetings. The first was to create a sense of empowerment among employees, at least within the state constraints the Department of Corrections had to obey. Lower-level employees would be increasingly involved in future waves of strategic planning, and employees were told to expect greater receptivity to their ideas than in the past. The second decision was to emphasize the centrality of employees to the organization's mission. A focus on empowerment fitted an organizational culture where the central managers tried to portray themselves as acting to support field staff rather than conflicting with them. More than half of the organizational vision statement that emerged from the 1996 meeting is given to the critical role of employees: "The employees of the Department are the cornerstone of the agency. They share a common purpose and a commitment to the highest level of professional standards and excellence in public service. The Department, through its unwavering commitment to its employees is a satisfying and rewarding place to work and grow professionally."

This is employee-centered MFR, an effort to simultaneously build a culture that is characterized by a results focus, a sense of organizational unity, and employee support and empowerment. The department's leadership believed that in a people-intensive industry such as correc-

tions, improved performance depends on the active engagement of employees and the internalization of organizational goals—an outcome that is better generated by voluntary rather than coerced actions, and therefore dependent on organizational culture. The focus on culture was partly a reaction to a similar strategic planning effort during the 1980s, which resulted in "a nice document that I'm not sure anybody in particular paid attention to," according to one manager.

The Department of Corrections sought to shape culture by using symbols, concrete evidence of support and communication. Symbols include the vision statement, which was prominently displayed in every correctional facility in the state, along with a mission statement and list of goals. Concrete benefits include an improved retirement system, improved safety through a revised classification system, and more days off by moving to 12-hour work shifts. Improved communication occurred primarily through training and was the most frequently cited benefit arising from MFR in Virginia. Better communication led to a greater sense of organizational unity, purpose, and especially cross-divisional cooperation between the traditionally separate institutional and community programs. There is now greater information sharing between institutions and community staff about prisoners on probation or parole, and procedures for preparing prisoners for release have been improved. In surveys, employees have largely shown support for organizational changes. One staff member summarized, "He [former commissioner Ron Angelone] has convinced the corrections officers that they're important. He has partnered with them from day one. Those folks know that somebody's looking out for them. Now I call that a major policy of investing in the line people. And that's been dramatic."

Double-Loop Learning in Vermont

Despite its relative success, managing for results in the Virginia Department of Corrections did not induce double-loop learning. The initial round of strategic planning in 1996 did not challenge the existing organizational goals and values. Instead, it reinforced the traditional values of safety and incarceration while emphasizing the key role of employees. In Vermont, by contrast, the primary benefit of MFR was double-loop learning: questioning the basic outcomes of corrections and convincing the external environment of the benefits of an alternative approach. How did this come about? In November 1991, shortly after John Gorczyk became commissioner, the Vermont Department of Corrections published a 20-year plan outlining many of the principles that would form the basis of policy documents, presentations, budget requests, and other strategic plans over the following decade.

The principles resulted from a decade of searching for a guiding philosophy within the department. Gorczyk and other senior managers had been involved in this search, which was framed in the context of previous correction policies in the state and the prevailing trend toward a more punitive approach. During the late 1960s and 1970s, the Vermont Department of Corrections focused on community treatment, with a minimal emphasis on incarceration and a strong faith in rehabilitation. This approach came under criticism because it ignored the real dangers posed by violent offenders who repeat their behaviors. It also ignored the politics of public safety. During the 1980s and 1990s, legislators in Vermont and across the nation reacted to public safety concerns through tougher sentencing, a punitive approach. Department leadership recognized the failings of the purely rehabilitative approach, but corrections research and their own analysis led them to believe that increased incarceration had negative outcomes for the majority of the corrections population and simply cost too much to be a practical long-term policy.

The 1991 plan outlined a series of principles that incorporated elements of both the rehabilitative and the punitive model, as well as some new ideas that became known as “restorative justice.” Restorative justice provided the Department of Corrections with a coherent philosophy and its own language, values, and outcomes: victim-based rather than offender-based, restorative rather than just retributive or rehabilitative.⁴ In searching for an alternative philosophy, the department conducted what it called market research, undertaking surveys and focus groups of the public and individual stakeholders in 1993. The results found opposition to some aspects of the existing corrections policy, support for others, and guidance for new ways of thinking about corrections. The market research found that people in Vermont wanted a criminal justice system that could do the following:

- Increase safety without inflicting needless harshness or deprivation
- Offer treatment when it is likely to work
- Hold offenders accountable for their actions, making them repair the damage they cause
- Return value to the victim and community
- Avoid spending money on incarcerating those who offer little threat to society
- Offer greater opportunity for public involvement in the criminal justice process.

While one part of the market research was based on finding out what customers wanted, another part was to better categorize its inputs and outputs. The Department of Corrections began to track in great detail different aspects of corrections and the wider criminal justice system: crime rates, sentencing, and differentiating prisoners by the type of crime and individual characteristics. With these find-

ings, the department identified a mandate to reshape its own operations and, to the extent possible, the wider criminal justice system. Since the early 1990s the department has used this philosophy as the basis for a number of innovative criminal justice programs.

It is too simplistic to suggest that managing for results was *the* factor that enabled double-loop learning. Clearly other factors were at work, most prominently the agnostic predisposition of the department’s leadership toward the traditional and prevailing corrections model, partly because of the social science training (rather than criminal justice training) of many senior managers.⁵ This culture of openness to new ideas among the departmental leadership led to a willingness (and need, given limited resources) to search for alternative goals and policies. It is not too much, however, to suggest that performance information both shaped the policy outcomes that emerged and allowed the Department of Corrections to convince others of the legitimacy of these outcomes. Commissioner Gorczyk is more assertive than this: “It’s [MFR] enabled us to significantly change the nature of the delivery of correctional services in Vermont. Without strategic planning I don’t believe in any way we could have gotten there.”

Learning Metaphors

What the corrections department’s leadership needed was a tool to help them structure their questions, their search for solutions, and, ultimately, to persuasively communicate these solutions. They employed a series of “metaphors,” of which MFR was just one.⁶ These metaphors provided a means by which the Department of Corrections staff and their stakeholders were offered a credible and alternative perspective to challenge the otherwise dominant “mental model” about the corrections function (Senge 1990). The credibility of the metaphors comes from their association with a respected body of knowledge or way of thinking and operating. The insights derived from the use of metaphors are more likely to be accepted by an audience that places a value on the metaphor. Such knowledge cannot be classified as simply ideological or radical—likely the reception that the restorative justice philosophy would have received if it had been presented in the absence of a narrative that included the use of metaphors.

The use of metaphors facilitated the questioning of existing technologies and the purposes of corrections, and it allowed the Department of Corrections to classify these technologies as ineffective and traditional corrections outcomes as ideological and counterproductive. For instance, a departmental analysis showed the punitive approach to incarceration, in aggregate, led to reduced public safety, as those who entered institutions have higher rates of recidivism than those placed into alternatives to incarceration, even after controlling for the risk profile of prisoners

(VDOC 2000b). One manager contrasted this with the previous rehabilitative approach, which was “based on their [previous Department of Corrections staff] belief, not science, that prisons were bad and that people could grow and learn if they were instituted in the community and treatment was provided.” The current departmental leadership portrayed itself as scientific and rational, particularly with its risk-management approach.

MFR was not the only metaphor used. Business and science were also used in conjunction with MFR. The business metaphor was particularly appropriate for communicative purposes during a time when the state was searching for more businesslike ways of government. This metaphor described the criminal justice system as a marketplace, where demand for services was growing without an equivalent increase in resources. By identifying and interviewing the customers of the criminal justice system—the public and corrections stakeholders—the Department of Corrections argued this demand was artificially created by legislators and did not reflect what customers actually want or were willing to pay for. The market research essentially told legislators, “we have talked to the people, and what they want is different from what you are giving them.”

All of the metaphors share the idea of logical, rational, nonideological judgment of performance based on empirical analysis. Strategic visioning—identifying the mission, vision, and principles of the organization—was used as a forum in which information could be codified into a set of philosophical statements. In these forums, participants make sense of the information derived from the knowledge metaphors and relate it to the organization’s operations and goals. As a process, strategic visioning occurred on a fairly frequent basis during the 1980s and 1990s, involving senior staff and intensive debate. As time passed, consensus developed on high-level strategic goals. The focus of the debate became specific programmatic planning and the reporting of goals and performance measures, which occurs annually as part of performance-based budgeting requirements.

Double-Loop Learning and Policy Shaping

How did the process of double-loop learning lead to new policies? Prompted by the new departmental vision, the Department of Corrections leadership was responsible for developing a set of new policies that sought to divert nonviolent offenders from incarceration and convincing the political environment to adopt these policies. Departmental analysis found that more punitive sentencing was the primary factor behind the increased inflow of offenders into the criminal justice system (VDOC 2000b). One option for dealing with prison overcrowding is to find ways to put offenders back into the community more quickly, or

to divert them from prisons in the first place. The department pursued this option in a number of ways. Probation and furlough jumped dramatically from the early 1990s. In 1994, the Department of Corrections created other intermediate, community-based sentencing options to incarceration. These options were more intrusive and expensive than probation, offering less due process for misbehavior, but less expensive than prison. Intermediate sentencing options have been used increasingly as an alternative to incarceration and as a way of controlling the size of the prison population.⁷

As new and traditional sentencing alternatives to incarceration reduced the demand for prison beds, the Department of Corrections developed techniques and programs to differentiate the corrections population based on the severity of the crime and potential to reoffend. The department dubbed this a “risk-management approach,” whereby the most expensive service, incarceration, is reserved for offenders that pose the most threat to society. The approach is based on the assumption that it is possible to classify offenders by their threat to society, where threat is calculated by multiplying the severity of offense by the likelihood of reoffense. According to the threat level of each offender, there is a logical response for their treatment in the criminal justice system. This risk-management approach portrays itself as pragmatic and scientific rather than ideological, relying on analysis of the corrections population and desired outcomes. It is the result of “the pragmatic judgment of whether the offender can safely re-enter society and be a productive citizen without intensive State intervention. The judgment combines both the science of risk assessment and the experience of the corrections professional” (VDOC 2000b). In addition to appearing pragmatic, the risk-management approach also has the virtue of being cost-efficient, offering a means of safely reducing the expenses of incarceration.⁸

The Department of Corrections created reparative boards in 1994. The program began by targeting low-risk, low-severity offenders who had pled guilty and received court sentencing for nonviolent crimes, such as driving under the influence, petty theft, or disturbing the peace. Reparative boards are made up of community volunteers appointed by the Department of Corrections, and board members encourage offenders to accept responsibility for their crimes. Offenders first tell their story, and the boards frequently organize meetings between offenders and victims. Contracts are created in which the offender and board members agree on appropriate reparations to the community and to the victims. Offenders who fulfill their contracts to the boards’ satisfaction are recommended for termination of probation.

Sixty reparative boards operate in 35 Vermont communities, involving hundreds of citizens. The recidivism rate

is lower for offenders in the program than for those on probation for similar offenses, and a portion of those who go before reparative boards would otherwise be incarcerated. In terms of the size of the overall corrections population, reparative boards represent a small but growing fraction. However, the Department of Corrections has devoted a high amount of energy in creating the boards, viewing them as the most tangible representation of the restorative justice philosophy. The department's strategic plan states, "Restorative justice focuses on the restoration of the victim, the repair of the community, and the reintegration of the offender as a productive citizen who has acknowledged responsibility for his offenses, made amends and repaired the damage. The restoration is done by the community, in the community, with the victim as partner" (VDOC 2000b).

The success of the original reparative boards enabled the Department of Corrections to extend such policies. A wave of market research conducted in 1999–2000 found public support for a subsequent expansion of the program to include all types of violent offenders, particularly sex offenders, who had participated in treatment programs. The research found the public wanted to be involved in these decisions, but also wanted the expertise of traditional governmental actors as a support, particularly law enforcement officials and community-based social services. To meet this demand, the department established community restorative justice centers in major towns and restorative programs in smaller communities, and it also offered training to volunteers. The centers provide a venue for reparative boards, as well as conflict resolution and neighborhood forums. Neighbors and officials can come together more easily, identify their particular capacity and concerns, and build partnership solutions. For example, a center in Burlington created a program for volunteers to help victims of property crime and vandalism.

Managing for Results in Shaping the Environment

The Vermont case illustrates an organization that has been highly successful in controlling and shaping its external environment. The Department of Corrections enjoyed not only increased financial support as the offender population increased, it also reshaped sentencing and release policies in ways that were at odds with the stated preferences of elected officials. In arguing for restorative justice, the department developed a standard narrative that points to the problems of overcrowding and excess demand on corrections, the causes of this problem, and the benefits of the innovative, pragmatic, and cost-effective options inspired by a restorative justice approach. In making its case, the Department of Corrections relied heavily on aspects of MFR—public surveys, strategic goal setting, population trends, performance data and targets, and charts—

to make these policy preferences appear logical, cost conscious, pragmatic, and nonideological. One senior manager admitted that "data has allowed us to establish significant credibility with the legislature, and traditionally have more influence on the overall criminal justice system and its practices than we would have absent that information." The narrative is calculated to impress that the department has thought long and hard about corrections, has carefully and rationally investigated every aspect of this function—relying on facts rather than ideology—and has developed solutions with demonstrably positive outcomes.

The Department of Corrections had a high degree of success in convincing the three branches of the state government and the public that a punitive approach to corrections is wrong, that incarceration is largely wasteful and counterproductive for most offenders, and that rehabilitation is sometimes possible and should be pursued. These arguments ran counter to the prevailing criminal justice policy trends in corrections throughout the country and in Vermont (*Economist* 2002). Proponents of these arguments have had limited success elsewhere and have been seen as soft on crime. Corrections officials in Vermont were largely able to avoid this characterization by emphasizing public safety and arguing for increased incarceration for violent offenders.

The Department of Corrections also argued for community involvement to reduce the distance between citizens and the justice system, a move that helped it to build wider and deeper public support for its mission throughout the 1990s. In Vermont, as elsewhere, corrections was an unpopular function. The only groups that cared about it deeply—offenders and their families—were not politically influential. Surveys of the public and particular focus groups provided a basis for building a constituency by finding out how the department could improve the public perception of corrections. The emphasis on public safety, reparative boards, and the wider restorative justice movement proved popular with Vermont residents.⁹ In addition, the department has built strong support from stakeholders with high political legitimacy, such as victims groups and a constituency that the department actually created, the members of the reparative boards.

As the Department of Corrections developed new principles and goals, it created performance measures to reflect these changes. Most of the traditional performance measures for corrections—recidivism, escapes, disciplinary infractions—represent negative outcomes, that is, outcomes for which improved performance means reducing the incidence of the measure. Negative outcomes, by their very nature, do not gain public or elected official attention unless they are moving in the wrong direction. The public does not cheer when zero escapes occur, but it does become upset if many prisoners escape (Barker 1998). De-

partment officials believed that positive measures would help to convince the public and the legislature of the importance and benefits of corrections (for instance, postincarceration employment, hours or dollar value returned to the community).

The support of the public and stakeholders has been critical in winning over elected officials. In 2000, the state legislature added the principles of restorative justice to its criminal justice policy: “It is the policy of this State that principles of Restorative Justice be included in shaping how the criminal justice system responds to persons charged with or convicted of criminal offenses. The policy goal is a community response to a person’s wrongdoing at its earliest onset and a type and intensity of sanction tailored to each instance of wrongdoing” (28 V.S.A. Sec 2a). This followed a four-year period during which a special legislative committee had been created on the future of the corrections system. The Department of Corrections targeted the committee, providing it with the standard narrative about corrections and reasons why the restorative philosophy worked.

Structure and Culture in Managing for Results

Incorporating Learning Forums

This article has argued that designers of MFR systems need to take routines that consider and discuss data (learning forums) as seriously as they do the routines that collect and disseminate data. Without such forums, MFR is an insufficiently specified structural approach to learning. As an organizational learning mechanism, MFR has been widely if imperfectly adopted. Almost all states have similar procedures in place that guarantee the collection and reporting of performance data, but they have struggled to establish new routines to ensure data is carefully evaluated. Even in Virginia, the primary learning forums are a byproduct of strategic planning procedures and training, not the conscious effort of organizational design. Strategic planning is an opportunity to contemplate the goals and performance of the past, but it has disadvantages as a learning forum. First, the primary purpose of strategic planning is goal setting, not process change. Strategic planning further limits single-loop learning by frequently excluding lower-level managers whose input can inform process change. Virginia partially overcame these problems by building process-review elements into its departmental strategic planning and by encouraging lower-level strategic planning at the regional and institutional levels. Does strategic planning work as a double-loop learning forum? It should, but instances such as Vermont are rare. Even in setting goals, most organizations limit their po-

tential to learn by implicitly or explicitly making any direct challenge to the existing organizational goals taboo and inappropriate.

The standard assumption that performance information will automatically become a factor in existing decision processes continues to shape MFR system design. Some decision routines are amenable to being substantially reordered to facilitate the use of data, such as contracting with providers of public services (Andrews and Moynihan 2002; Heinrich 1999). Budget and other policy decision routines appear to be largely impervious to the use of performance data in anything other than a marginal or advocacy role (Bennett and Hill 2002; Joyce and Tompkins 2002). In such cases alternative learning forums should be developed.

The organizational learning literature and case studies offer insights on various aspects of learning forums in terms of the nature of the forum, who is involved, how participants relate to one another and the role of performance information (see table 2).

Table 2 Elements of Learning Forums

<ul style="list-style-type: none"> • Routine event • Facilitation and ground rules to structure dialogue • Nonconfrontational approach to avoid defensive reactions • Collegiality and equality among participants • Diverse set of organizational actors responsible for producing the outcomes under review • Dialogue centered, with dialogue focused on organizational goals • Basic assumptions are identified, examined, and suspended (especially for double-loop learning) • Quantitative knowledge that identifies successes and failures, including goals, targets, outcomes, and points of comparison • Experiential knowledge of process and work conditions that explain successes, failures, and the possibility of innovation

Leavitt and March (1990) emphasize the need for such learning as a routine matter. The key characteristic of such forums is to create dialogue, which is considered a precursor to learning. Senge points out that dialogue allows participants to examine their own thinking and create common meaning. Dialogue gives managers an opportunity to practice, experimenting with decisions styles in a way that is not feasible in practice. He suggests the necessary aspects of successful dialogue include the suspension of assumptions, facilitation that explains and enforces the ground rules for dialogue, the active involvement of members, collegiality among participants, and a willingness for members to raise the most pressing organizational issues for dialogue (Senge 1990, 238–49, 259–60). Argyris and Schön (1996) discuss the dangers of confrontational uses of data, leading to defensive reactions rather than to learning; therefore, an open and nonconfrontational approach among colleagues is preferable to a top-down analysis of failure. Lipshitz, Popper, and Oz (1996) point out the benefit of an equal footing for all members of a learning fo-

rum. Collegiality not only defuses defensive reactions, it also encourages the sharing of information about successes.

Performance data highlight the relative success or failure of a unit or process (relative to the past, a target, another part of the organization, or a different organization), but only dialogue can help to identify and disseminate the reasons *why* success occurs. Interviewees from Virginia and Vermont noted that a sense of professional pride is at least as strong a motivator as high-level demands for performance. Mintzberg (1994) argues that forum participants should be the decision makers whom reformers hope will use performance information, not central planners who produce formal policy evaluations that are removed from managerial realities. For single-loop learning this means lower-level employees who oversee organizational processes, and for double-loop learning it means more senior-level employees who understand the entire organization and its environment. Kaplan and Norton (1996) emphasize a team-based approach that links dialogue to critical organizational goals. Learning is enabled by “a team problem-solving process that analyzes and learns from the performance data and then adapts the strategy to emerging conditions and issues” (252). Such analyses should be open to both quantitative and qualitative evidence, including correlations between process changes and intended outcomes, in-depth management gaming/scenario analysis, anecdotal evidence, interim review of the progress of process changes, and peer review of performance. Both the Virginia and Vermont cases illustrate how managers brought different types of information to the table: sometimes quantitative data, but sometimes experiential information or new policy ideas. Dialogue among peers subjected all types of information to questioning and review. Kaplan and Norton also argue that diversity of expertise improves the potential for team learning, and they advocate teams that are both cross-functional and mix senior and operational managers, as Virginia did. They also warn that routine learning forums based on performance data maintain a constant risk of devolving into dialogues that are exclusively about operations rather than strategy.

The Inescapable Role of Culture

What these cases make abundantly clear is that the success of structural learning procedures is inextricably bound up with the culture of the organization. The Department of Corrections in Alabama sought to implement MFR without changing any other aspect of the organization. As a result, MFR is simply considered a reporting mechanism, the sum of its reporting mandates and not a means to learn. The performance-improvement ethic in Virginia found its way to lower-level supervisors in institutions because those supervisors considered it a shared norm of expected behavior—they followed the logic of appropriateness estab-

lished in their culture. In Vermont, senior management sought metaphors that acted as alternative frameworks for considering their function—a cultural approach to learning, but one in the context of a structured MFR process. The departmental leadership group was able to engage in double-loop learning because of a culture of openness and experimentation. However, the department struggled to gain the degree of buy-in among institutional staff that Virginia enjoyed. To a large degree this was because the Vermont Department of Corrections undertook a more ambitious task, seeking to challenge the existing goals of the organization and emphasizing nonincarceration programs. Understandably, this was met with some resistance by prison officers, whose daily existence is shaped by the demands of keeping prisoners safely incarcerated (Shtull 1999).¹⁰ In contrast, Virginia did not seek to change its organizational goals, but to increase effectiveness toward goals that staff were familiar with and supported.

Learning, Authority, and the Tradition of Management Controls

Closely related to a learning culture are a series of structural constraints that limit managerial authority, hence the potential for learning-based change. Senge notes that “Frustrations appear to occur in settings where teams seeking to develop their learning capabilities lack the power to act in the domains about which they are learning” (1990, xvii). The potential for this type of frustration is particularly pronounced for public managers who are subject to the decisions of elected officials and other external actors.¹¹ Public bureaucracies became associated with rules and cultures that have traditionally restricted the scope of managerial action, fostering learning in terms of rule observance or the entrepreneurial avoidance of rules. A shift to goal-based learning is difficult, given the continued existence of the old culture and rules alongside results-based reforms. Even in Virginia, where the Department of Corrections attempted to create a sense of empowerment, there remained state-imposed legal restrictions on uses of financial and human resources. The case evidence suggests a circular relationship between learning and the authority to initiate change and the frequent mismatch of these qualities for the purposes of performance improvement. Performance enhancement is based on learning, but the willingness to first engage in learning is influenced by whether managers believe learning can be put to good use. The manager who believes learning from performance information is unlikely to be used because of controls limiting authority is less likely to engage in the process of creating forums for learning in the first place.

The mismatch between learning and authority is particularly pronounced for single-loop learning and process improvement. Those who have the time, interest, and ex-

expertise to examine information and to make well-informed judgments are likely to be lower-level managers, who lack the authority to make the appropriate changes. Senior managers or elected officials with high authority are likely to lack the interest, motivation, and operational expertise to consider and make informed judgments about specific processes. As a result, performance information is likely to remain unused, potential learning opportunities untaken, and ineffective managerial processes unchanged. One response, pursued in the three cases, is to provide more and more information to elected officials and senior managers in the hope they will take an interest in management issues. Ultimately, however, this response does not change the realities of limited time, interest, and expertise that restrict higher-level officials from engaging in such decisions.

The Effect of Performance-Reporting Mandates

The factors that permit learning from performance data—time, interest, expertise, and contextual knowledge—suggest that MFR should be an agency-centered organizational learning mechanism. However, MFR has been adopted as a series of state-level requirements that apply equally to all agencies (Snell and Grooters 2001). The heavy reporting burdens and the one-size-fits-all nature of these requirements may induce a sense of compliance and frustration among agency staff (Franklin 2000). Alabama is typical of many states, where performance information is required as part of the annual budget reporting process. The Department of Corrections reacted by treating MFR as a reporting mandate rather than as an opportunity to learn. The already overworked departmental budgeters were given responsibility for meeting this requirement. Unsurprisingly, the budget staff saw MFR as a tool to argue for increased resources, not as a tool to change management practices. Once the department completed its reporting requirements, managers were not involved in—or from their point of view, bothered by—MFR until the next reporting cycle.

Such a dismal picture was not repeated in Vermont and Virginia, which also have reporting mandates. In part this was because both states enjoyed greater organizational resources that could be applied to supporting MFR with training programs and specialized staff support. It was also because the corrections leadership saw MFR mandates as an opportunity to further the organizational agenda they were pursuing. The Department of Corrections in Vermont had been effectively undertaking MFR long before all state agencies were required to do so, first using MFR as a tool to question existing goals, and then to promote the restorative justice philosophy. MFR in the Virginia Department of Corrections had been abandoned in the 1980s until a 1996 requirement to undertake it once more. The leadership saw this as an opportunity to examine the critical is-

ues facing the organization and a mechanism to implement change.

Statewide MFR mandates, therefore, may be a mixed blessing. They create a real reporting burden for agencies, and statewide officials appear unlikely to actually use the information presented to them. But they can also aid managers who are already intent on pursuing change. As Weick (2001) notes, organizational interpretation is shaped by senior-level managers and then transferred to the rest of the organization. In Vermont and Virginia, MFR provided a tool to engage in interpretation and disseminate the results.

The Political Context of Double-Loop Learning

Double-loop learning, whether it occurs among elected officials, political appointees, or bureaucrats, is the divination of dramatic policy alternatives. It is a political act. It requires dealing not just with matters of uncertainty, which additional information can resolve, but also reducing ambiguity, which demands both interpreting information *and* employing value judgments (Feldman 1989). Transforming learning into a reality requires political skills. The Vermont case demonstrates how MFR not only enabled double-loop learning, but also shaped the external environment as part of a pragmatic rationale for significant policy change. The Department of Corrections leadership was politically skilful, creating a convincing narrative about how traditional correctional policies were failing and showing the need for alternatives. They cultivated support from stakeholders and the public and expanded the traditional corrections constituency.

The Department of Corrections leadership was also fortunate. Their narrative may have been persuasive, but they were lucky to find elected officials willing to listen and willing to move away from the punitive approach. They also benefited from the long-term continuity of a group of reform-minded individuals among senior managers, with Commissioner Gorczyk leading the organization from 1991 to 2001. Continuity allowed the development and promotion of a distinct vision. Such continuity is rare, and it is even more rarely combined with a willingness to engage in dramatic change. Weick (2001) notes that it is difficult to overcome agreed-upon organizational goals and understandings. After 20 years of consistently shifting toward a new model of corrections, the Department of Corrections still struggles to gain the full support of many line employees. Without such continuity, the prospects would have been substantially dimmer.

Conclusion

There are two main ways to interpret this article; both are valid and not completely inconsistent with one another.

However, one is pessimistic and one is optimistic. The pessimistic interpretation argues that the promise of results-based government is not on course to be kept. Such reforms have been interpreted and implemented without consideration of factors that will enable learning—and therefore, more efficient and effective government—to occur. As an organizational learning mechanism, these reforms have failed to structure learning forums that allow for the consideration of performance data among its target users. The highly structural bias of these reforms also ignores the role of culture and the logic of appropriateness in learning. Goal-based learning is only likely to occur when the design of results-based reforms take these factors into account.

The optimistic interpretation celebrates the cases for identifying the possibility that goal-based learning *can*

occur. Results-based reforms may need to be reconsidered, but if done correctly, they can create value. From this perspective, the real quandary for organizational actors is not *whether* to pursue organizational learning, but *what type* of learning to pursue. March (1999) argues there is a trade-off between the exploration of new possibilities (akin to double-loop learning) and the exploitation of old certainties (akin to single-loop learning). Both types of learning compete for resources and attention. Ultimately, the long-term capacity of the organization demands a balance between the two approaches: “Adaptiveness requires both exploitation and exploration. A system that specializes in exploitation will discover itself becoming better and better at an increasingly obsolescent technology. A system that specializes in exploration will never realize the advantages of its discovery” (March 1999, 185).

Notes

1. Argyris (1999) points out that the learning literature tends to be divided into two subsets: the learning organization and organizational learning literatures. The learning organization approach emphasizes the adaptability of organizations, has a positive action bias, and is associated with consultants and practitioners. Organizational learning, by contrast, tends to be more academic and theoretical, focusing on the barriers to and difficulties of learning. It points out that learning can occur only through individual members of the organization, and therefore it depends on the limits and weaknesses of human cognition and the potential for coordination. Learning organization writers are prescriptive, assuming the ability of organizations to perform heroic feats of adaptability. The organizational learning approach treats “observed impediments as unalterable facts of organizational life” (Argyris 1999, 14). This article attempts to straddle the two literatures, looking at deliberate efforts to foster organizational learning and pointing out its failings and possibilities
2. The focus on culture and the central role of the employee reflects the strong influence of the human relations school on the organizational learning literature.
3. To increase the reliability of the selection process, I used two distinct but overlapping approaches. First I used 1998 and 2000 Government Performance Project grades in the area of managing for results. The high performer, Virginia, received an A– in both years, Vermont received a B– and a B in 1998 and 2000, respectively, and Alabama received an F in 1998, improving to a D+ in 2000. Second, I took closed-ended survey questions and content analysis from the Government Performance Project to create a quantitative scale that measured the degree of implementation of strategic planning and performance-measurement systems for all 50 state governments. Because MFR mandates typically require both agency-level and state-level reporting, the scale measured the availability of both statewide performance information and agency-specific information (sampling the functions of corrections, education, and transportation for all states) in state and agency budgets, performance reports, and strategic planning documents. States were divided into three categories: high, medium, and low levels of MFR implementation. To be eligible for selection, a state had to satisfy the category both in terms of statewide and agency performance information.
4. The concept of restorative justice did not originate in Vermont. Variations of the restorative justice idea were occurring in many places during the 1980s (Lemley 2001). These ideas appealed to managers in Vermont, but their own learning process also led them to emphasize other elements of the justice system that were not associated with the restorative justice movement, including a focus on punishing violent offenders and the use of alternative sentencing.
5. Simon (1991) observes that organizations themselves do not learn, but learning occurs within organizations through their individual members. Therefore, new organizational learning can occur only if existing members acquire new knowledge or if the organization hires new members with a variety of knowledge. The latter mechanism was clearly at work in the case of Vermont and in the educational background of its senior managers.
6. The term “metaphor” was used by a senior manager who was closely involved in the search for knowledge. Describing the business approach to corrections, he stopped to emphasize that he viewed business as a metaphor for operating, not as a literal model that the public sector should adopt. It is worth noting that Lipshitz, Popper, and Oz (1996) also use the term “metaphor” to describe the cultural approach to learning.

7. Between 1994 and 1999 the population under corrections control expanded from 7,511 to 12,386. During this time the percentage incarcerated stayed relatively steady, dropping from 12.3 percent to 11.6 percent. The percentage of those on probation also dropped from 77 percent to 74 percent of the total population. The difference was largely made up through the introduction of intermediate sanctions, accounting for 4.8 percent of the corrections population in 1999 (VDOC 2000a).
8. In its 2000 strategic plan, the department claims the development of intermediate sanctions has prevented the creation of an additional 1,000 bedspaces, which would have cost an additional \$21.5 million per year (Vermont DOC 2000b).
9. Between 1994 and 1999 surveys administered to the public found the department's approval rating jumped from 37 percent to 44 percent.
10. The actors involved in the double-loop learning in Vermont are senior department staff, not institution or field staff. This helps to further explain the disjunction between the department philosophy and the culture of institutions. Having not undergone the same process of learning, institutional staff are less accepting of the philosophy developed by senior managers. Greater emphasis on communication may overcome this issue to some extent, but it cannot replicate the process of learning for the institutional staff.
11. The role of the judicial branch and the American Correctional Association as particularly influential environmental

actors in the area of corrections requires some brief discussion. As with any other external stakeholders, they can dictate their priorities, limiting the opportunities for organizational change and innovation. Courts have become increasingly active in asserting the rights of prisoners and in intervening to direct the provision of correctional services (DiIulio 1987). The American Correctional Association defines a set of accreditation standards that almost all corrections systems seek to achieve. Given the attention the accreditation process takes and the legitimacy it provides, it might reasonably be argued that managers are less likely to innovate as a result. However, the courts and accreditation can also promote change, and they have done so for MFR reforms. One reason for adopting MFR is to demonstrate to courts that a department of corrections has a plan for the future and does not require judicial oversight. This was certainly the case in Alabama, where the department was selected as a pilot for performance management partly because it had frequent interactions with the courts. The willingness of a professional organization such as the American Correctional Association to adopt an innovation is the most reliable way to promote that innovation among its members (DiMaggio and Powell 1983). The American Correctional Association has adopted the rhetoric of MFR, and it is converting its 21 manuals of accreditation standards into performance-based standards that include outcome measures.

References

- Andrews, Matthew, and Donald P. Moynihan. 2002. Why Reforms Don't Always Have to Work to Succeed: A Tale of Two Managed Competition Initiatives. *Public Performance and Management Review* 25(3): 282–97.
- Argyris, Chris. 1999. *On Organizational Learning*. 2nd ed. Malden, MA: Blackwell.
- Argyris, Chris, and Donald Schön. 1996. *Organizational Learning: A Theory of Action Perspective*. 2nd ed. Reading, MA: Addison-Wesley.
- Barker, Anthony. 1998. Political Responsibility for U.K. Prison Security—Ministers Escape Again. *Public Administration* 75(1): 1–23.
- Barnow, Burt S. 1992. The Effects of Performance Standards on State and Local Programs. In *Evaluating Welfare and Training Programs*, edited by Charles F. Manski and Irwin Garfinkel, 277–309. Cambridge, MA: Harvard University Press.
- Bennett, Charlie, and Herb Hill. 2002. Performance Management Systems: The Importance of Defining their Purpose. [http://www.dpb.state.va.us/VAResults/Material/Policy Service.pdf](http://www.dpb.state.va.us/VAResults/Material/PolicyService.pdf).
- Boston, Jonathan. 1991. The Theoretical Underpinnings of Public Sector Restructuring in New Zealand. In *Reshaping the States*, edited by Jonathan Boston, John Martin, June Pallot, and Pat Walsh, 1–26. Auckland, New Zealand: Oxford University Press.
- Brudney, Jeffrey L., F. Ted Hebert, and Deil S. Wright. 1999. Reinventing Government in the American States: Measuring and Explaining Administrative Reform. *Public Administration Review* 59(1): 19–30.
- DiIulio, John, Jr. 1987. *Governing Prisons*. New York: Free Press.
- DiMaggio, Paul J., and Woody W. Powell. 1983. The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review* 48(4): 147–60.
- Downs, George W., and Patrick D. Larkey. 1986. *The Search for Government Efficiency*. New York: Random House.
- The Economist*. 2002. Too Many Convicts. August 10, 13.
- Feldman, Martha S. 1989. *Order without Design: Information Production and Policy-Making*. Stanford, CA: Stanford University Press.
- Fiol, C. Marlene, and Marjorie A. Lyles. 1985. Organizational Learning. *Academy of Management Review* 10(4): 803–13.
- Forrester, John P., and Guy B. Adams. 1997. Budgetary Reform through Organizational Learning: Toward an Organizational Theory of Budgeting. *Administration and Society* 28(4): 466–88.
- Franklin, Aimee. 2000. An Examination of Bureaucratic Reaction to Institutional Controls. *Public Performance and Management Review* 24(1): 8–21.

- Hedberg, Bo. 1981. How Organizations Learn and Unlearn. In *The Handbook of Organizational Design*, edited by Paul C. Nystrom and William H. Starbuck, 8–27. London: Oxford University Press.
- Heinrich, Carolyn J. 1999. Do Government Bureaucrats Make Effective Use of Performance Management Information? *Journal of Public Administration and Research Theory* 9(3): 363–93.
- Ingraham, Patricia W., and Donald P. Moynihan. 2001. Beyond Measurement: Managing for Results in State Government. In *Quicker, Better, Cheaper? Managing Performance in American Government*, edited by Dall Forsythe, 309–35. Albany, NY: Rockefeller Institute Press.
- Joyce, Philip G., and Susan S. Tompkins. 2002. Using Performance Information for Budgeting: Clarifying the Framework and Investigating Recent State Experience. In *Meeting the Challenges of Performance-Oriented Government*, edited by Kathryn Newcomer, Ed Jennings, Cheryl Broom, and Allen Lomax, 61–96. Washington, DC: American Society for Public Administration.
- Kaplan, Robert S., and David P. Norton. 1996. *The Balanced Scorecard: Translating Strategy into Action*. Boston, MA: Harvard Business School Press.
- Klay, William Earle. 1994. Management through Budgetary Incentives. *Public Productivity and Management Review* 41(2): 59–71.
- Koteen, Jack. 1989. *Strategic Management in Public and Non-profit Organizations: Thinking and Acting Strategically on Public Concerns*. New York: Praeger.
- Leavitt, Barbara, and James March. 1990. Chester I. Barnard and the Intelligence of Learning. In *Organization Theory: From Chester Barnard to the Present and Beyond*, edited by Oliver E. Williamson, 11–37. New York: Oxford University Press.
- Lemley, Eileen C. 2001. Designing Restorative Justice Policy: An Analytical Perspective. *Criminal Justice Policy Review* 12(1): 43–65.
- Liner, Blaine, Harry Hatry, Elisa Vinson, Ryan Allen, Pat Dusenbery, Scott Byrant, and Ron Snell. 2001. *Making Results-Based State Government Work*. Washington, DC: Urban Institute. <http://www.urban.org/UploadedPDF/results-based-stategovt.pdf>.
- Lipshitz, Raanan, Micha Popper, and Sasson Oz. 1996. Building Learning Organizations: The Design and Implementation of Organizational Learning Mechanisms. *Journal of Applied Behavioral Science* 32(3): 292–305.
- Mahler, Julianne. 1997. Influences of Organizational Culture in Learning in Public Agencies. *Journal of Public Administration Research and Theory* 7(4): 519–40.
- March, James G. 1999. *The Pursuit of Organizational Intelligence*. Malden, MA: Blackwell.
- Melkers, Julia E., and Katherine Willoughby. 1998. The State of the States: Performance-Based Budgeting Requirements in 47 out of 50. *Public Administration Review* 58(1): 66–73.
- Merton, Robert. 1940. Bureaucratic Structure and Personality. *Social Forces* 18(4): 560–68.
- Mintzberg, Henry. 1975. *The Nature of Managerial Work*. New York: HarperCollins.
- . 1994. The Fall and Rise of Strategic Planning. *Harvard Business Review*, February, 107–14.
- Moynihan, Donald P. Forthcoming. Managing for Results in State Government: Evaluating a Decade of Reform. *Public Administration Review*.
- Moynihan, Donald P., and Patricia W. Ingraham. 2003. Look for the Silver Lining: When Performance Based Accountability Systems Work. *Journal of Public Administration Research and Theory* 13(4): 469–90.
- Osborne, David E., and Ted Gaebler. 1992. *Reinventing Government: How the Entrepreneurial Government is Transforming the Public Sector*. New York: Penguin.
- Radin, Beryl A. 1998. The Government Performance and Results Act (GPRA): Hydra-Headed Monster or Flexible Management Tool? *Public Administration Review* 58(4): 307–17.
- Schein, Edgar. 1992. *Organizational Culture and Leadership*. 2nd ed. San Francisco: Jossey-Bass.
- Schick, Allen. 2001. Getting Performance Measures to Measure Up. In *Quicker, Better, Cheaper? Managing Performance in American Government*, edited by Dall Forsythe, 39–60. Albany, NY: Rockefeller Institute Press.
- Senge, Peter. 1990. *The Fifth Discipline*. New York: Doubleday.
- Shtull, Penny. 1999. *Assessment of the Vermont Department of Corrections Vision, Mission, and Values, and Principles 1998 Revision*. Waterbury: Vermont Department of Corrections.
- Simon, Herbert. 1991. Bounded Rationality and Organizational Learning. *Organization Science* 2(1): 125–34.
- Snell, Ron, and Jennifer Grooters. 2001. Governing-for-Results: Legislation in the States. A Report to the Urban Institute. <http://www.urban.org/UploadedPDF/results-based-stategovt.pdf>.
- U.S. Government Accountability Office (GAO). 1994. *Managing for Results: State Experiences Provide Insights for Federal Management Reforms*. GAO/GGD-95-22. Washington, DC: GAO.
- . 2001. *Managing for Results: Federal Managers Views on Key Management Issues Vary Widely Across Agencies*. GAO-01-152. Washington, DC: GAO.
- . 2003. *Program Evaluation: An Evaluation Culture and Collaborative Partnerships Help Build Agency Capacity*. GAO-03-454. Washington, DC: GAO.
- Vermont Department of Corrections (VDOC). 2000a. Facts and Figures FY 1999. www.doc.state.vt.us.
- . 2000b. Corrections in Vermont: A Five-Year Plan—Making Vermont Safe for the 21st Century. www.doc.state.vt.us.
- Weick, Karl. 2001. *Making Sense of the Organization*. Oxford, UK: Blackwell Publishing.
- Wildavsky, Aaron. 1975. *Budgeting: A Comparative Theory of Budgeting Processes*. Boston: Little, Brown.
- Wilson, James Q. 1989. *Bureaucracy: What Government Agencies Do and Why They Do It*. New York: Basic Books.