

A Symposium

The Human Capital Challenge in Government*

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Human capital is the combination of knowledge, skills, and reasoning abilities (KSAs) possessed by a work force. It is widely recognized that the quality of an organization's human capital is key to high performance and a competitive advantage in formal organizations. This realization was not always present. In classical economics, employees were not seen as assets such as land, raw materials, and capital; workforce staff were considered costs, a drag on the bottom line. Following World War II, this practice of conceptualizing labor as mainly an expense began to change with the rise of quantitative economics. Traditional economic thinking was unable to explain the dramatic rise in American national income which far exceeded the traditional resources that economists used to predict productivity. Theodore Schultz, in a speech before the American Economic Association in 1960, offered an answer to the question of why America was outproducing what its natural resources would predict as its upward limits. Schultz concluded that the knowledge, skills, and abilities—a nation's intellectual or human capital—enabled a country to transcend the ceiling of what the conventional inputs to productivity

could explain. The idea was introduced that, in the modern age, human capital was an asset and the critical technology at work (Salmon, 1991). Nowadays it is appreciated that approximately sixty percent of the competitive advantage in organizations comes from advances in worker intelligence (A.P. Carnevale, 1991). In the past, about 80 percent of all jobs involved following standards rules and operating procedures and only 20 percent of occupations required the exercise of significant judgment. Today, those proportions are exactly the reverse (Watkins and Marsick, 1993: 6); the old assumptions about human capital no longer hold in the face of these new realities.

Historically, discussion about human capital centered around the personnel processes of "training" (advancement of skills for application in the short run) or "development" (evolution of higher-order competencies, usually of the interpersonal variety, to prepare people for greater responsibilities in the future). This orientation to human capital is rather narrow, focusing primarily on the skills of those already on the job.

These days it is understood that "making" human capital, i.e., upgrading the skills and competencies of an already

hired workforce, is just one of the many challenges an organization faces. "Buying" qualified human capital is another strategy for securing the necessary skill mix that an organization needs. Purchasing KSAs necessarily focuses attention on the personnel process of staffing (recruitment and selection). This latter option assumes, of course, that prepared workers exist in the labor market; this is a supposition that is proving less reliable every year (e.g., Johnston and Packer, 1987).

No matter the source of human capital, the question of what people need to know to do good work is always at issue. The answer to this problem varies by organizational sector, level, mission, and nature of operating environment. What constitutes a fully competent workforce is also a moving target, always evolving upward in ways that are not entirely predictable.

The core issue underlying every aspect of human capital development involves knowledge, particularly with respect to how people learn. Learning has always been at the heart of every theoretical argument about the benefits of investing in human capital development. However, the question of learning has often taken a back seat to other concerns such as whether or not people liked the instructor and enjoyed the instructional experience, as if these were worthwhile ends in themselves. Evaluation of training results has seldom been a primary concern either; but this state of affairs is changing. These days there is less preoccupation with various forms of instructional technique and more consciousness about whether employee training and education programs are actually producing skills and competencies that transfer to the work situation.

It is not enough to provide employees with opportunities for training or traditional classroom instruction if no real learning takes place. Learning implies changes in both behavior and performance. It does not matter much if people are able to master ideas in the abstract which do not influence how they actually behave. There is no use returning from a training retreat enthusiastic about new ways of doing things if the organizational culture and dominant knowledge system stays the same and eventually extinguishes the new learning. Training and education has no power if the principal results only change people's vocabulary (espoused theories) rather than their actions (theories in use) (Argyris and Shoen, 1978). In short, how education and training affect doing real work is the outcome that matters.

Awareness about the importance of developing human capital has soared during the past decade—both in the business sector which faces continuing worldwide competitiveness pressures and in government where resources are being slashed dramatically. The introduction of new technologies and the general downsizing of organizations have forced both private companies and government agencies to think more about the residual skills of organizational personnel. The introduction of new management methods associated with high quality and customer service as a standard of performance and the increased use of work teams, for instance, have also pushed human capital development to the front of the strategic planning agendas of public organizations. Moreover, the issue of workforce preparedness is the central theme in the substantial number of *Workforce 2000* type

studies that address America's readiness to compete effectively at the dawn of the new century. School-to-work issues, basic skills training, and the capacity of America's schools to prepare people for the modern workplace continue to be a source of major concern.

New methods of organizing work also serve to elevate attention to human capital issues. Deindustrialization and the displacement of many employees increase the need for career adjustments and retraining. Literacy rates in American society are problematic enough so that too many people aren't even trainable without some remedial education. Citing the availability of a trained work force as an advantage in economic development programs is now a widely accepted practice. In sum, the quality of intelligence of labor has emerged as a critical issue in the success of the post-industrial society, the age of specialized knowledge and the high tech information worker.

The issue of developing human capital cannot be addressed apart from other problems in organizations. Every aspect of organizational life can be judged according to its impact on human capital development. For example, questions concerning styles of leadership, communication processes, group dynamics, uses of power, labor-management relations, introduction of new technologies, and methods of change must now be recast to take into account how they influence the human capital question.

Traditional philosophies of management based on a presumption of the superior intelligence of organizational elites are being reconsidered in terms of how they affect opportunities for learning throughout the organization. It is no

longer viable to structure organizations in ways where substantial numbers of workers down-the-line are expected by and large to check their brains at the door. It takes everybody knowing how to do something or to be able to make judgments about what is called for in a work situation to achieve real results. As the need for such continuous learning engages progressively more personnel at every level of government a profound effect on conventional hierarchical governance arrangements in organizations will be among the more important consequences of this realization.

History instructs that every significant management reform of this past century has focused on how to harness worker know-how on the job. Scientific management (Taylor, 1911), for instance, tried to rationalize every aspect of working knowledge so that it could be controlled and efficiently applied to problems of production. The legacy of scientific management is twofold; taking away skills from some workers (crafts) and providing employability skills to others (immigrants). The effects of "one best way" management thinking eventually alienated a wide spectrum of employees, though it no doubt raised their standard of living as measured in modern materialist terms. Because there seemed to be a point of diminishing returns in the application of time and motion studies (dumbing down the work), the science of human relations was engaged to soften the worst features of scientific management and to reduce the alienation it generated. This attack on alienation, later known as "blue collar blues," aimed to make people feel better about their jobs and to engage them more in deciding how the work could best be

done based on their experience in doing the work.

Human relations opened the door to the idea that the chief function of the executive was no longer just to get people to cooperate in following the rules established by higher ups or to make the organization's social system conform to idealized models. The main function of administrative leadership, from the organizational humanist perspective, is to get people to think more for themselves, to be critically self-reflective about what they are doing and to trust their own judgment about what is called for in many situations. From an historical point of view, this shift in thinking is based on an understanding that managing different kinds of knowledge systems at work—translating between various forms of knowing—is the key to realizing the full productive potential of an organization. It is revolutionary thinking, indeed (Carnevale and Hummel, forthcoming).

Human capital development is one of the most important topics in human resources administration. Traditional personnel texts usually devote a single chapter to the topic. In the contemporary setting, however, everything from staffing, classification, compensation, group or team work, diversity, labor-management relations, and a host of other traditional personnel topics entail some knowledge or learning implications. It is fair to say that every aspect of modern human resources administration can play a strategic part in promoting organizational learning (D.G. Carnevale, 1992).

It is the purpose of this symposium to provoke discussion on a few of the wide range of subjects associated with human capital development. Admittedly, concen-

tration on a few issues is limiting, but a number of questions with broader implications for the study of human capital are identified. After previewing each contribution, a list of additional areas of needed research is catalogued.

Brain Management

Wes Agor's professional note on brain skill management (BSM) opens the Symposium. If an organization were to be conceived as a human brain, then it is fair to say that its full capacity is typically underutilized. Its capacity for intuitive, flexible, and creative action receives less notice and support than its more logical-rational aspects, even though the problems faced by organizations frequently involve the whole brain, especially those parts that house less logical, rational, and organizing capacities. Agor shows that organizational decisions vary widely in character; he argues further that the type of thinking required to solve some problems is wholly unsuitable to manage others. He demonstrates that organizations realize their full intellectual potential when they are able to involve appropriate kinds of thinking (brain skills) in differing problem situations. Much of Professor Agor's research has concentrated on the considerable value of "thinking outside of the box" and this particular contribution continues his long-standing interest in appreciating the value of alternative ways of knowing in organizations. He demonstrates how brain skills management can be accomplished. His work continues to critique the general problem of how bureaucratic approaches to organization not only tend to fragment the way employees perceive the world, but they also typically discourage critically

self-reflective awareness about what is called for in some circumstances. The metaphor of an organization conceived of as a brain is indeed useful, and Agor's piece shows that many organizations have been blind to the opportunity of capitalizing on their full potential.

The Manager's View of Education and Training

James Conant's study of what managers think about executive training and development brings this conventional topic into new perspective. What managers need to know is a subject of endless speculation in the field of public administration. Conant's research raises significant questions about both the content and methods of delivery of management skill development programs in the contemporary public service. At the heart of his research is the enduring question of the relative value of classroom instruction versus actual job experience as the best way to prepare managers for the work they must perform.

Conant finds that the importance of classroom instruction is seen as progressively less important to executives as they move up the administrative hierarchy. In many respects, this reinforces the view that technical-rational skills become increasingly less crucial as one moves into organizational leadership roles. While being a solid technician may help a person make the jump from front-line worker to supervisor, the ability to develop political-interpersonal competencies and making informal judgments concerning the spanning of knowledge systems may be even more valuable capacities for advancement over time. This finding also

underscores the argument developed by Holmer and Adams (1995), researchers who contend that a shift in management education from the strictly cognitive to achieve greater focus upon the emotional and psychological aspects of real work needs to take place. Taken together, these observations suggest that public administration education ought to be more open to experiential learning on the job where managers confront the "snakepit" realities of organizational life, relying less on the idealized "clockwork" presented in the typical university classroom (cf. Schwartz, 1990). Managers operate in contexts where their *emotional* selves are frequently deeply involved in their workplace problems. They are seldom standing apart from the reality, looking to apply some established theory to remedy what they think they see. Operational reality is a great deal messier than the holding environment of the typical classroom; it is no wonder that there is a severe limit to the degree of transference of classroom skills to real problems on the job.

Conant's conclusions are echoed in a recent thoughtful book on organizational learning. Nancy Dixon (1994: 105) states her theme this way:

It may be possible for managers to become more proficient at technical skills in a 'time away from work' setting, but development occurs in context. Management development cannot occur in the abstract, away from the issues and challenges of managing an organization, because those challenges provide the data and dissonance upon which the reorganization of self is based; they are the grist of the change. Even the most experiential forms of classroom training, such as case studies or role plays, cannot provide the level of reality that is needed for development. In such

hypothetical activities the individual is not compelled to experience the frustration of failing at something he or she truly cares about, not the deep concern that others will suffer for one's mistakes, nor experience the satisfaction of completion, nor the overwhelming complexity of decisions.

The implications of Conant's findings for the design and delivery of management training—perhaps even the MPA degree itself—are obviously profound. They mean, for example, that technical training and conflict skills in human judgment should be incorporated into the core of the MPA curriculum. For instance, it might be most worthwhile to organize some aspects of management development curricula based on the actual problems that students are experiencing on their jobs; mentoring programs could be a major element in the instructional design in this regard. A mentoring "course" could be something that runs for a year rather than a few weeks. This line of argument means that the classroom should be the workplace itself to a considerable extent. The question raised here is how long the field of public administration can ignore research findings in which executives reporting that only five per cent of what they learned about managing was mastered in the classroom (McCall, et al., 1988). Rethinking what we teach managers and how we seek to help them in doing their jobs needs to be done.

Municipal Responses to An Aging Workforce

Most of the people who need human capital development programs are already on the job. That means the supply side of the human capital equation can be over-emphasized and organizations can come

to invest disproportionately in staffing instead of paying more attention to how present personnel are trained or how prevailing work processes are structured if they want to get the most out of their existing human capital assets (Mishel and Teixeira, 1991). One feature about the contemporary work force is very clear—it is aging, and its skills rapidly are becoming obsolete. The human capital problem in the American workplace cannot be resolved satisfactorily without addressing the question of the role of the older worker.

In this symposium, Jonathan West and Evan Berman tackle the difficult issue of how management is responding to the aging of the municipal workforce. They are among the first in the public sector to deal with this powerful demographic issue. Their study evaluates the workforce stereotypes applying to older workers. They make a solid case for including the problem of an inexorably aging labor force into strategic human resource planning in government. They evaluate several of the more conventional stereotypes about the learning capacities of older workers, and they offer a number of strategies for dealing with what is certain to be an important human resources research and policy issue into the future. Their contribution is both far-sighted and of immediate value in a society whose paradigm of how long workers can make useful contributions on the job and who has the ability to deal constructively with change and new learning is plainly discriminatory toward the older worker. Given the fact that a likely public policy path to be taken to manage the insufficiency of retirement reserves is the raising of retirement age, the West and Berman piece takes on a particularly im-

portant position in the public personnel administration literature.

Technical Skills Training

If one looked at the literature on human capital development it would appear that most of what people need to learn has to do with operating new equipment or developing a wide variety of interpersonal skills. Much of the training that occurs in the public workplace reflects the latest trends in management philosophy, whether that is *Theory Z*, *quality circles*, *TQM*, *reinvention*, or *re-engineering*. Discussions about leadership, vision, employee empowerment, teamwork, win-win bargaining, and building organizational community abound. What tends to be neglected is technical skills training. Though there is little discussion of it, much more of it is going on than is generally appreciated.

Sally Selden provides an introduction into the topic of technical skills training, and then uses the national center for technical skills training of the U.S. Postal Service to show what is involved in such training. She makes clear that, despite the powerful influence of socio-technical systems thinking in organizational theory and behavior, much more attention is devoted to getting the social system upgraded than learning how to deploy, integrate, and maintain the technical side of the organization enterprise. She also illustrates how many of the most sophisticated methods of training instruction—the high end of the technological curve in human capital development—have arisen from the technical skills venture. Selden disabuses the reader of the notion that government agencies such as the postal

service are not well-prepared to compete in a world of fast-changing technological and performance requirements. The opposite is clearly the case.

How Much We Still Don't Know

There is much we still don't know about human capital development in government. Here are just a few of the areas that are ripe for our professional attention.

Mapping the Learning Enterprise.

Not so long ago, the U.S. Department of Labor invested a good deal of money trying to “map” the learning enterprise in the private sector. The central questions were: who gets training, how much do they get, what types of training do they receive, is training based on any systematic assessment of need, what are the results of training on organizational performance, how does the training relate to the larger strategic goals of the organization, and how much is spent on human capital development? It was at that time, despite our best efforts, that we realized that comparable data were not available for the public sector. Think about these questions. Go to your local government or state government and ask these questions. It is likely that they don't have very good answers. It says much about the state of the learning enterprise in the public sector. We researchers need to help public organizations confront these issues.

Assessing the Returns to Training.

While this topic is incorporated in the concerns identified immediately above, it is worthwhile to reinforce it here. It is well known that training and development activities are often considered “soft,” one of the first things cut during retrenchment. This is like cutting out part of the institu-

tional brain in growing knowledge-based systems. One of the reasons for this perception is that not much evaluation of training impact is done in government. Until we can show a real return on investment—measured in hard outcomes such as productivity improvement—then this unfortunate undervaluing of training and learning will continue to prevail. “And a good time was had by all”—the measure of the typical end of session smile barometer is an inadequate response to this problem.

Joint Training and Education. In government, the likelihood that the public administrator is trying to improve work processes with a unionized work force is very high—almost four times greater than in business. Even so, virtually all of the innovations in labor and management joint training continue to occur in the business sector. The scope and delivery of such programs need much more attention than it is currently getting in the public sector. Unions can either be partners or obstacles to change; what role they end up playing depends a lot upon how they are treated.

Learning. We don't know enough about learning. We don't fully appreciate that people have widely differing learning styles, and we have yet to come to grips with the fundamental implications of learning theory; not much of the research on adult learning has been incorporated into public administration education. If we are unclear about what learning means in its basic social, structural, philosophical, psychological, and cognitive aspects, then how can we improve what people are asked to learn and improve how they learn it? On what basis can we understand what is good teaching? On what basis do we approach our

students if we don't grasp the basic elements of individual, group, and organizational learning dynamics?

Content. What is it that we want people to know? What, for instance, constitutes a good public administration education? There are standards, but where did they come from? Did we round up the usual suspects and then some group legitimized them—put their seal of approval upon them—in some way? What was the basis for that? Is this a case of power determining knowledge? Did we really understand what people need to know to work in leadership roles in public service, business, or the not-for-profit sector? What are the elements of a good public affairs or public administration education? What is the basis for an education for citizenship in a civil society? How do we know?

There are other questions as well, but these may help provoke some discussion about where we might go from here. There are no easy answers, of course; however, human capital development entails strengthening the capacity for people to think for themselves, to be able to master skills and solve problems, to handle change in peaceful ways, and to find meaning in knowing. Our democratic society needs to promote these abilities among its public administrators, and the public administration profession must lead the change on this area of student need.

Notes

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