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The Public Administration of Knowledge Organizations

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Abstract

Governments rely on information for effective decision-making in their provision of public goods and services. The quality and design attributes of these systems affect the volume and nature of economic activity, the resilience of natural and social systems, and the legitimacy of governance regimes. Accordingly, all industrialized nations and many developing ones have complex formal knowledge systems that include such organizations as scientific research agencies, national statistical agencies, weather and natural resource monitoring systems, national security intelligence agencies, and educational institutions. The agencies that comprise these systems are important examples of "knowledge organizations." By highlighting important contributions that have appeared in the *Journal of Public Administration Research and Theory*, our goal in this virtual issue is to refocus attention in public administration on knowledge organizations as deserving objects of inquiry. As knowledge organizations are designed with the functional objectives to create, process, and disseminate information, we organize the literature according to four interrelated knowledge intensive public administrative functions. The focus on knowledge organizations showcases public administration scholars' capacity to meaningfully integrate key concepts and ideas from related domains of social inquiry. It also underscores a promising opportunity for public administration scholarship to export important ideas.

Introduction

Governments rely on information for effective decision-making in their provision of public goods and services. As such, all industrialized nations have complex formal knowledge systems that include such organizations as scientific research agencies, national statistical agencies, weather and natural resource monitoring systems, national security intelligence agencies, and educational institutions. The quality and design attributes of these systems affect the volume and nature of economic activity, the resilience of natural and social systems, and the legitimacy of governance regimes (Anderson and Whitford 2017).

These systems, though, are simply examples of "knowledge organizations" in the service of the public sector. The attributes of these and other knowledge organizations often become concerns of political and economic significance. The purpose of this virtual issue is to offer a set of important and useful papers that have contributed to our thinking about knowledge and knowledge organizations. Knowledge organizations are designed to create, process, and disseminate information. From this, we must conclude that many public-sector agencies take the form of a knowledge organization—and that most public servants take on the roles of knowledge producers or consumers. It is these conclusions that form the basis for this virtual issue on the public administration of knowledge organizations.

Our focus on the *public administration* of knowledge organizations is deliberate. We are cognizant that the topic of knowledge organizations is of lasting concern and importance in broader literatures on organizations and management. For instance, Drucker (1988) as well as Liebowitz and Beckman (1998) have highlighted the importance of knowledge organizations for the functioning of modern economies. Yet, those voluminous literatures mostly focus on the instrumentality of

knowledge organizations in economies that, over time, have transitioned from agricultural to manufacturing and now postmanufacturing bases. It is significant that most contributors to those literatures often see knowledge organizations as engines of the new economy.

As a starting point, we want to emphasize how the general sociological, organizational, and economic perspectives on knowledge and knowledge organizations are different from the tradition of the study of knowledge organizations in the public and nonprofit sectors. Rather than investing knowledge into the production of widgets or market efficiencies, most public bureaus and nonprofit organizations create, process, validate, and disseminate information. Importantly, the public administrative functions of knowledge organizations advance according to the pursuit of expressly normative objectives such as those related to the promotion of democracy, justice, or equity.

Public bureaus and nonprofits act as knowledge organizations in a world where information itself is negotiated. There is political and social interest in controlling these organizations because the information produced becomes part of the larger fabric of societies and reshapes competition in markets. This extends to the funding of these organizations, their arrangements among other organizations, their structures and staffing, and products. Perhaps the best recognized of these organizations is the university. Certainly, universities live in markets, but their roles are usually defined with regard to broader public and social goals, often vis-à-vis a public charter.

By highlighting important contributions that have appeared in *JPART*, our goal in this virtual issue is to refocus attention in public administration on knowledge organizations as deserving objects of inquiry. Although we make no claim that the articles discussed here constitute the entirety of the Journal's work on knowledge organizations, we are confident that they represent the spectrum of issues and ideas under longstanding consideration. The featured articles provide evidence of both a sustained interest among public administration researchers in knowledge organizations and also a promising opportunity for further inquiry.

We have organized these contributions according to four interrelated public administration functions:

1. Generating knowledge for action by multiple stakeholders
2. Generating infrastructure for building knowledge
3. Managing organizations for the production and dissemination of knowledge
4. Using knowledge in the context of complexity

These four functions have evolved over time. For instance, the study of educational institutions, especially at the K-12 level, has become an important domain of the study of public performance. Yet, this special issue emphasizes that all studies of such organizations have important lessons for our understanding of knowledge organizations.

Generating Knowledge for Action by Multiple Stakeholders

Bretschneider, Marc-Aurele, and Wu (2004) investigate the underlying assumptions associated with the commonly used analysis of "best practices" in public administration research. Finding motivation in a classic debate, they argue, "while Simon and Waldo disagreed on issues of emphasis there is clear agreement that the relevant domain of public administration was deliberative actions taken to achieve some ends" (p. 305). From this, they argue that theory in public administration should "inform action" and that, in connecting theory to practice, there should be a focus in public administration research on controlling for factors that are not just explanatory but can also be manipulated in practice. Speaking with the knowledge stakeholder in mind, the authors explain that to sufficiently identify "best practices," a complete set of all potential actions must be assessed and compared and researchers must follow a process that is 1) comparative, 2) assessing an action, and 3) clearly linking an action to an outcome.

Coursey (1992) examines how policy-makers determine the quality of policy research and how the perceived credibility of information influences policymakers' utilization of research evidence when making policy decisions. Coursey focuses on improving the existing understanding of knowledge utilization in public administration. Based on Bozeman's (1986) credibility theory, Coursey asserts that policymakers' use of research evidence depends less on the accuracy of the evidence in question and more on the policymaker's perception about the credibility of information. These individual perceptions are derived from the subjective evaluation of various external factors such as the reputability of the knowledge bearer. This empirical study of knowledge found a link between credibility and quality of solution. Credibility asserted more influence on proposals with medium or high net benefit. Interestingly, study findings suggest that individuals may reject the optimal policy proposal when the perceived credibility of the information presented is low.

Generating Infrastructures for Building Knowledge

Schalk, Torenvlied, and Allen (2009) examine the relationship between public organization collaboration and organizational performance through a network theory lens. Like several other studies included here, they focus on universities as knowledge organizations while paying special attention to organizational

embeddedness within network structures. They find that networks with cohesive structures have significantly better performance than those with a more hierarchical structure.

Also focusing on universities as knowledge organizations, Rabovsky (2012) studies how such organizations are supported, reformed, and advanced in the modern context of political oversight. A timely emphasis is placed on performance based budgeting policies and how they are associated with the performance of universities as knowledge organizations. Findings show that incentive-based policies generally have greater positive impact on research universities than other public and nonresearch institutions, where the impact is often negative.

Continuing the focus on state support for universities, Lowry (2015) expands previous theories on the delegation of policymaking authority through an empirical analysis of 10 states' funding mechanisms for public postsecondary education. Although the trend in public management research is to focus on the overall amount of funding by state governments for comparative purposes, Lowry considers the design of mechanisms by which funding reaches postsecondary education institutions including block grants, contracts, and need-based student aid. Not surprising, Lowry aptly concludes that design matters when it comes to supporting universities as knowledge organizations.

Generating infrastructure for building knowledge does not necessarily have to relate to strategy and resources. For example, Damanpour and Schneider (2008) propose a theoretical model of innovation adoption and examine the relationship between various characteristics of innovation (i.e., new technology) and characteristics of public managers. They aim to understand how these characteristics affect public organizations' decisions to adopt innovative technology. Consistent with more general studies, the authors find that innovation is associated with environmental factors and that cost and perceived impact were positively associated with the adoption of technological innovations.

Managing Organizations for the Production and Dissemination of Knowledge

Meier and O'Toole (2001) explain that empirical studies in public management often focus on education because public education is easy to operationalize and involves measurable inputs (such as spending) and outputs (such as student achievements). In their contribution to this virtual issue, Meier and O'Toole examine the ways in which public managers implement policies and programs in the context of the network theory. A central idea of this article is that a public manager's responsibilities in a network structure are different from their responsibilities under the traditional hierarchical structure. The study found that network interactions with nonpublic stakeholders had positive impacts on organization performance as network management increases managers' ability to efficiently use resources.

While stakeholder involvement is associated with managerial benefits in the context of knowledge organizations, it is not always easy to support. McDermott (2004) focused on government reforms that aimed to improve public service delivery by incorporating the use of incentives and merit-based evaluation in public service since the 1980s. Using a case study methodology, the measured benefit of policy reform was trust among stakeholders and public organizations at the state and local levels. McDermott concluded that not only did these public organizations lack the capacity to effectively implement such reforms, but also the reforms were not adequately funded to truly demonstrate a funding incentive for increased accountability. There was no will for reform as the reforms ultimately decreased trust and collaboration.

When it comes to effectively managing knowledge organization, Ruggiero, Duncombe, and Miner (1995) provide a powerful observation: "The best known theories on the causes of inefficient behavior by managers and elected officials suggests that greater efficiency is likely to be associated with greater internal and external pressure to perform and where information—particularly on performance, costs, and production technology—is readily available" (p. 424). In their contribution to this issue, they go on to recognize that a number of environmental factors also contribute to the success of schools as knowledge organizations. They find that socioeconomic conditions, expenditures, mixture of public and private providers, and a number of other factors work collective to determine technical efficiency in schools.

Using Knowledge in the Context of Complexity

Not surprisingly, the bulk of articles in this virtual issue pertain to the *use* of knowledge. Continuing with the now established tradition of focusing on universities as knowledge organizations, Landry, Lamari, and Amara (2003) study the extent to which university research is used in public agencies and whether it varies between different policy domains. The study identifies key factors that influence policymakers' use of university research such as perceived relevance and importance, knowledge acquisition efforts, and levels of administration.

Shifting to focus on knowledge use in federal agencies, Gano, Crowley, and Guston (2006) interviewed public managers from both knowledge producers (e.g., Department of Health and Human Services) and "downstream" knowledge consumers (e.g.,

academic institutes, professional associations, budgetary agency). In a world where scientific knowledge has proven to be the subject of politicization, Gano and her colleagues find both knowledge consumers and producers to be interested in the so-called "shielding" of knowledge from political considerations. Willem and Buelens (2007) offer an international perspective in their treatment of knowledge sharing between public organizations in Belgium. An important contribution here is the shift in focus from scientific knowledge to informal or tacit knowledge. They find that greater trust and more informal and lateral coordination (i.e., higher relational intensity among departments) positively affect knowledge sharing activities and effectiveness. Connecting issues of knowledge to other topics in public administration, the authors found that trust has a positive impact on knowledge sharing and that public organizations have characteristics that are less beneficial for knowledge sharing such as lengthy bureaucratic procedures (i.e., red tape) that hinder lateral coordination mechanisms and decrease trust.

Continuing in the tradition of casting public agencies as knowledge organizations, Jennings and Hall (2011) examine how public managers in state agencies draw upon different information to guide program implementations. Survey results indicate that when faced with knowledge needs, public managers relied first on the internal staff of their respective agencies. Then managers typically sought consultation by other state agencies and, finally, external sources such as scientific research or professional associations. Consistent with other research utilization literature, findings suggest that public managers tend to seek information within their own policy communities (e.g., executive staff, legislators, governors, etc.), which is often sufficient enough for policy implementation. Only when there is a high degree of technical complexity involved do public managers seek council from the scientific community.

Performance of contemporary public organizations is strongly affected by the efficient use of knowledge according to Richards and Duxbury (2014), who apply the "absorptive capacity" concept from technology transfer literature to public organization knowledge acquisition. The concept of absorptive capacity suggests that prior experiences and knowledge stocks among public managers will determine the extent to which organizations search, store, and incorporate new knowledge into their operations. The authors hypothesize that managerial practices and perceptions of applicability influence knowledge acquisition. Their survey results indicate that if there is significant homogeneity in the prior knowledge of a group of employees, then that particular group's knowledge acquisition will be higher. However, individuals with a strong base of knowledge may not be motivated to acquire more. Applicability increases knowledge acquisition. Management matters as managers can facilitate the connecting and transferal of knowledge. Another important predictor is the contextual information (e.g., organizational strategies and intended goals) that helps public employees better understand the relevance and importance of external knowledge and encourages knowledge acquisition activities. Two implications for practice include the value of the role of the middle manager as culture setter and liaison between management, front-line staff, and recipients. Second, the study emphasizes utility of common-knowledge and programs to lay a foundation among staff.

In this issue's final contribution, Sicilano (2017) approaches the topic of knowledge acquisition among public employees using a knowledge network perspective. Sicilano argues that individuals working in public organizations (i.e., public school teachers) are embedded in a complex social network, which they often utilize when seeking advice or knowledge. When confronted with a problem, individuals make judgments on where expertise resides in each knowledge-specific network. Employees' information seeking behaviors will differ depending on whether they require tacit or explicit task-relevant knowledge. According to Siciliano, the primary determinate of the type of knowledge sought is the level of codification of the task in question. If teachers are developing syllabus or lesson plan, they tend to seek explicit knowledge (e.g., formal research publication). On the other hand, knowledge regarding efforts to manage student behavior in the classroom is much more difficult to codify, thus teachers will seek informal advice from their peers (i.e., tacit knowledge). Overall, Siciliano finds that public employees are more willing to seek external knowledge when tasks are explicit. For tasks requiring tacit knowledge, public employees tend to ignore external knowledge and seek advice from internal peers from similar backgrounds.

Conclusions

This virtual issue's focus on the study of knowledge organizations in public administration highlights a long tradition in the field that has contributed meaningfully to our broader understanding of these organizations. This is a proven domain of research where public administration thinking has skillfully and effectively integrated ideas from other fields. Yet, we think that this is also an area where public administration scholars can be idea exporters. Future contributions might benefit from increased interaction with other threads of research. A unifying attribute of modern and even premodern societies is the systematic reliance upon knowledge to facilitate social interaction, collective action,

and social progress. Systematic processes for producing or transferring knowledge to use can be found in nearly every level of social enterprise. It is, therefore, no surprise that assorted social theorists including organization, systems, economic and institutional scholars, rely on theories of knowledge to make sense of the world. For example, in economics, theories of knowledge describe how information affects the structure of market interactions (Hoff and Stieglitz 1997; Garmaise and Moskowitz 2004). Social learning theories have been used to understand collaborative approaches to the management of natural resources (Schusler, Decker, and Pfeffer 2003). And in general management, Grant's (1996) knowledge-based theory of the firm describes the structure and boundaries of the firm. Indeed, important questions related to knowledge organizations will continue to be pursued in *JPART*, but we are also hopeful that important contributions to these questions from public administration scholars might also appear in the literature of related fields.

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