Knowledge Management Implementation at the Women's Branch of the Institute of Public Administration in Saudi Arabia: A Proposed Model

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Abstract

This article aims to introduce a proposed model of knowledge management implementation at the Women's Branch of the Institute of Public Administration (WIPA). The model was built after a review and analysis of literature related to knowledge management implementation in higher education institutions. The research includes three sections. The first section deals with a theoretical framework of knowledge management, including a knowledge management definition, components of knowledge management systems, an academic knowledge framework, an organizational knowledge framework, and processes of knowledge management. The second section reviews and discusses the proposed model of knowledge management implementation at WIPA. Finally, the article concludes with a discussion of the success factors and expected barriers to the proposed model.

Abstrak

Artikel ini bertujuan memperkenalkan suatu model implementasi manajemen pengetahuan yang sudah dilakukan pada Women's Branch of the Institute of Public Administration (WIPA). Model ini merupakan hasil review dan analisis literatur yang relevan dengan implementasi manajemen pengetahuan pada institusi pendidikan tinggi. Kajian ini terdiri dari tiga bagian. Bagian pertama membahas kerangka teori tentang manajemen pengetahuan, yang meliputi definisi manajemen pengetahuan, komponen sistem manajemen pengetahuan, kerangka fikir pengetahuan akademik, kerangka fikir pengetahuan organisasional, dan proses manajemen pengetahuan. Bagian kedua mereview dan membahas model yang sudah dikembangkan WIPA. Pada bagian akhir, paper ini ditutup dengan pembahasan mengenai factor keberhasilan dan prediksi hambatan-hambatan yang mungkin dihadapi dalam implementasi model tersebut.

Key Words: Knowledge Management, Institute of Public Administration, WIPA, Saudi Arabia, Higher Education

Introduction

The rationale for the current research has emerged from several perspectives. The first perspective concerns an initiative for sharing knowledge between faculty members of the Public Administration department. The initiative started in September 2005.

It included the agreement between faculty members to share and exchange their assets of knowledge related to training programs offered by their departments. It resulted in saving a tremendous amount of time and effort in preparing and processing these programs, besides the emerging of creative ideas for exercises, case studies, and training programs. In addition, the initiative increased the participants' ability to deal with emergency situations and reduced pressure at work.

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The second and the most important perspective that makes knowledge management implementation a necessity is the current situation of the workforce at the Women's Branch of the Institute of Public Administration (WIPA), which is characterized by the existence of two generations. The newly appointed faculty members who have enrolled in the service during the last five years comprise the new generation. They represent 40 percent of the total number of employed faculty. The other one is the generation of experts that represents 60 percent of the total number of faculty employed at WIPA; it is expected that 10 percent of them will retire during the next five years. Therefore, a prompt action to maintain the knowledge capital of WIPA is required (Personnel Department 2013).

Based on the previous perspectives, and in accordance with the lack of any formal preparations or regulations aimed to transfer and maintain knowledge capital of the organization, WIPA is expected to lose a portion of its accumulated knowledge and experience of the organization.

On the other hand, the developmental role of the Institute of Public Administration (IPA) requires the institute to keep up with new trends in management, which will effectively contribute to the achievement of excellence in the delivery of government services. Thus, since knowledge management is one of those trends, the WIPA is required to take the initiative of knowledge management, apply it, and then transfer the experience to other government agencies and institutions.

According to several studies (Kidwell et al. 2000; Yang and Ismail 2005; Yeh 2005; Witt et al. 2007), the adoption of knowledge management can harvest such benefits as excellence at the individual, group, and organizational level, improvement of the decision-making process, an increase in productivity, the development of creative ideas, and effective maintenance of intellectual capital. It also increases the ability to respond rapidly to changes in the surrounding environment.

The purpose of this article is to present a proposed model of knowledge management implementation at WIPA. The model aims to provide an integrated strategy of knowledge management implementation by the year 2018. It is based on the theoretical framework described below and various perspectives that prompted the researcher to think about knowledge management implementation.

Theoretical Framework

Knowledge Management Definition

"Knowledge is derived from information, but it is richer and more meaningful. It includes familiarity, awareness, and understanding gained through experience or study, and results from making comparisons, identifying consequences, and making connections. Some experts include wisdom and insight in their definitions of knowledge" (De Brun 2005, 3).

Ikujiro Nonaka and Hirota Takeuchi (1995) propose the concept of explicit and tacit knowledge. Explicit knowledge is the knowledge that is processed by information systems, codified or recorded, archived, protected, and documented by the organization. Tacit knowledge represents knowledge that exists in people's heads so that it is extremely difficult to transfer and cannot be written down. Both explicit and tacit knowledge are the intangible assets any organization holds in order to provide excellent service to their customers. Knowledge has become the driving force in our economy today. It powers the ability of professionals to be their best and to deliver service of value to customers.

In last two decades, the focus on knowledge has led to the advancement of the knowledge management discipline. There is no one definition of knowledge management, and it is mainly defined from the point of view of the researchers or the organization that is implementing initiatives. At the United Nations Economic Commission for Latin America and the Caribbean (ECLAC), knowledge management is defined as distinct but interdependent processes and activities of creation, capture, storage and retrieval, transfer, and application (ECLAC 2010).

The processes and activities can broadly be divided into those that bring about the creation of knowledge and those that are willing to share knowledge. In its most basic form, knowledge management is a circular creation process that

ensures the availability of new knowledge and makes this knowledge transferable. This leads to the creation of further knowledge, and so the process continues (Abdullah and Date 2009). However, knowledge management is also the practice of harnessing and exploiting intellectual capital in order to gain competitive advantage and customer commitment through efficiency, innovation, and effective decision-making (Chou and Yaying 2005, 36).

Accordingly, the researcher defines knowledge management as a continuous dynamic process that includes a range of activities and practices designed to determine, create, and develop knowledge, while distributing it and making it accessible. This will result in improving organizational performance, as well as the capacity of the organization to adapt with the rapid changes in the surrounding environment.

Knowledge Management Components

Lisa A. Petrides and Thad R. Nodine (2003) mention that knowledge management brings together three core organizational resources: people, processes, and technologies. These enable the organization to use its knowledge capital more effectively. Furthermore, the researcher considers these resources as the main components of knowledge management system. People are the first component. They own the knowledge, but organizations should promote policies, procedures, and practices to help them share, develop, and manage this knowledge (Peterides and Nodine 2003, 11).

Processes represent the second element of knowledge management components. They are essential to convert the tacit knowledge to explicit knowledge and make it accessible. Michael J. Marqurdt (2011) has identified a number of processes for knowledge management including acquisition, creation, analysis, application, and validation, as well as storing, sharing, and transferring knowledge.

Equally important are the technology and information systems which represent the third element. They contribute to the success of knowledge management projects, since they make the knowledge broadly accessible to users or targeted groups and promote the tracking and exchange of useful information across departments (Petrides and Nodine 2003, 11).

What Does Knowledge Management Involve?

Knowledge management requires some essential processes and strategies by which knowledge is created, identified, shared, developed, and used effectively in organizations. It is not about establishing new departments, getting new technologies, or hiring new staff. And there are many approaches, tools, and strategies for adopting knowledge management. In general, knowledge management implementation requires changing people's values, cultures, and behaviors, and providing people with easy access to each other. In addition, it provides access to relevant information resources.

It is worth mentioning here that since knowledge management is a relatively new concept, there is no single agreed upon approach or best practice for implantation. This is the time of trial and error, so each organization can select the approach and strategies that serve its needs and matches its abilities and resources (De Burn 2005, 4).

After reviewing and analyzing 12 frameworks of knowledge management implementation, Kim Seonwoo, Lee Changyon, and Park Yongtae (2006) provide a comprehensive framework for knowledge management implementation. The framework includes six steps: (1) setting a strategy, (2) preparing structure, (3) spreading the culture and values, (4) identifying the needed process and activities, (5) building knowledge management system, and (6) making adjustment needed after the implementation.

Comparatively, in educational settings, knowledge management systems should provide a set of designs that link people, processes, and technologies, and should discuss how organizations can promote policies and practices that help people share and manage their knowledge (Petrides and Guiney 2003).

In higher education, there are two types of knowledge involved: academic knowledge and organizational knowledge. Academic knowledge is the primary purpose of any higher education institution. On the other hand, organizational knowledge refers to the institution's processes and businesses, the institution's strength and weakness, the markets the institution serves, and the factors that are critical to organizational success (Coukos-Semmel 2003).

Academic/Organizational Knowledge Frameworks

Jeremy Galbreath (2000) identified four major processes used in building the culture of knowledge sharing and collaboration in higher education institutions. The four processes include: (1) making knowledge visible, (2) increasing knowledge intensity, (3) building knowledge infrastructure, and (4) developing a knowledge culture. From an academic knowledge perspective, the learning community should start at the individual level to create departmental knowledge and domains of knowledge across departments that share academic interests or disciplines, and then create networks of institutional knowledge and networks with other institutions and corporations (Galbreath 2000, 28).

The organizational knowledge framework includes all processes related to the collecting, coding, documenting, and storing knowledge of the organization such as roles, regulations, procedures, and practices. It also makes knowledge accessible to people.

The Processes of Knowledge Management

The knowledge subsystem of a learning organization that was determined by Marqurdt (1996) refer to the management of acquired and generated knowledge within the organization. It includes the acquisition, creation, storage, and utilization of knowledge.

More specifically, *acquisition* refers to the collection of existing data and information from within and outside the organization. *Creation* refers to new knowledge that is created within the organization through problem solving and reflection on experience. *Storage* is the process of coding and preserving the organization's valued knowledge for easy access by any staff member, at any time, and from anywhere. Finally, *utilization* involves the mechanical, electronic, and interpersonal movement of information and knowledge, both intentionally and unintentionally.

These processes are ongoing and interactive rather than sequential and independent. The collection and distribution of information occurs through multiple channels, each having different frames. An example is an online newsletter that systematically gathers, organizes, and disseminates the collective knowledge of the organization members (Marquardt 1996, 26).

The Proposed Model of Knowledge Management Implementation at WIPA

The IPA was founded on 4 October 1961 as a body-corporate and autonomous government agency. The institute was established in order to increase the efficiency of public employees and educate them. The establishment of the institute also aimed to make employees capable of shouldering their responsibilities and using their authority in a manner that would raise the level of administration and support towards the foundation of national economic development. In addition, the IPA contributes to the administrative organization of government departments, offers consultations on administrative problems referred to the IPA by government ministries and agencies, undertakes administrative research works, and enhances cultural ties in the field of public administration.

Faith in the importance of women's contributions to administrative and overall development led to the Saudi government's establishment of the women's branch of IPA in 1983 in Riyadh. The inauguration of this branch reflected the government's awareness of the need to employ female personnel, including their development and preparation within the role of administrative development. The establishment of this branch also required an upgrade to the efficiency of women's departments in the agencies operating in different areas of development.

WIPA consists of six departments, including the Programs Department, the Research and Consultations Department, the Trainees' Affairs Department, the Computer Centre, the Administrative Affairs Department, and the Public Relations Department. The departments work collectively to achieve the following objectives:

1. Raising the efficiency of government employees and preparing them scientifically and practically to assure their responsibilities are fulfilled

in a way that ensures high level of performance and secures administrative development,

2. Contributing to the preparation and development of administrative regulations for the women's departments in government agencies,

3. Counseling to resolve administrative problems that face the regulations,

4. Carrying out research and scientific studies related to administrative sciences and their applications,

5. Contributing to the fulfillment of the training needs of state employees, and

6. Cooperating with women's administrative bodies in raising the level of performance.

WIPA seeks to achieve the pervious goals through three main activities: training, consultation, and research. As mentioned above, the adaptation of knowledge management at WIPA has become an urgent and essential need in order to maintain intellectual capital, to overcome the problem of the generation gap, and to achieve excellence in individual and organizational performance. In those circumstances, the researcher has come up with an initiative of knowledge management implementation at WIPA with the encouragement and support of top management. The next section of this article presents a detailed description of the proposed model.

Implementing Knowledge Management at WIPA

The application of knowledge management at WIPA has become an inevitable and crucial requirement that reflects the transitional orientations of Saudi government towards knowledge-based economy. It also represents one of the main strategic goals for the "Ninth Development Plan," which stipulates "to move towards a knowledge-based economy and consolidate the basis of an information society" ("Ninth Development Plan" 2010, 27).

The fundamental need to adopt the knowledge management model at WIPA is caused by several perspectives. The developmental role of the Institute of Public Administration in Saudi Arabia aims to en-

able government agencies to keep up with recent developments in the field of management and human resources development. The role bears the responsibility for developing human capital in the form of knowledge, skills, attitudes, and abilities through training programs, in addition to its responsibility in organizational development and reform through consultations.

The orientations and the support of the top management for new ideas, initiatives, and development projects in order to achieve excellence at local, regional, and global levels are also important for implementation. The goals and directions of the "National Strategy for the Transition to a Knowledge Society," which include "the provision of advanced human capacity through the creation of a global system for human resources development, which is characterized by a high degree of diversity and dynamism, innovation, and self-development" are also crucial ("National Strategy for the Transition to Knowledge Society" 2013).

The "Ninth Development Plan" that adopted the orientation of building the knowledge-based economy requires developing the capacity of public sectors in knowledge generation, dissemination, transfer, and exchange ("Ninth Development Plan" 2010, 27). The current status of WIPA's workforce that is characterized in the convergence of age group for human capital (generation gap) is also important, as it may contribute to a great loss of intellectual capital.

Finally, while the weaknesses in the process of the documentation of knowledge, expertise, and procedures may result in wasting time and efforts at routine work, the enthusiasm and willingness of WIPA employees to adopt and implement knowledge management was evident from the first workshop conducted to introduce knowledge management as a new concept at the WIPA.

Knowledge Management Implantation Model

The proposed model aims to provide an integrated strategy of knowledge management implementation at WIPA by the year 2018. The following sub-goals and strategies were created by the author and derived from the main goal of the proposed model.
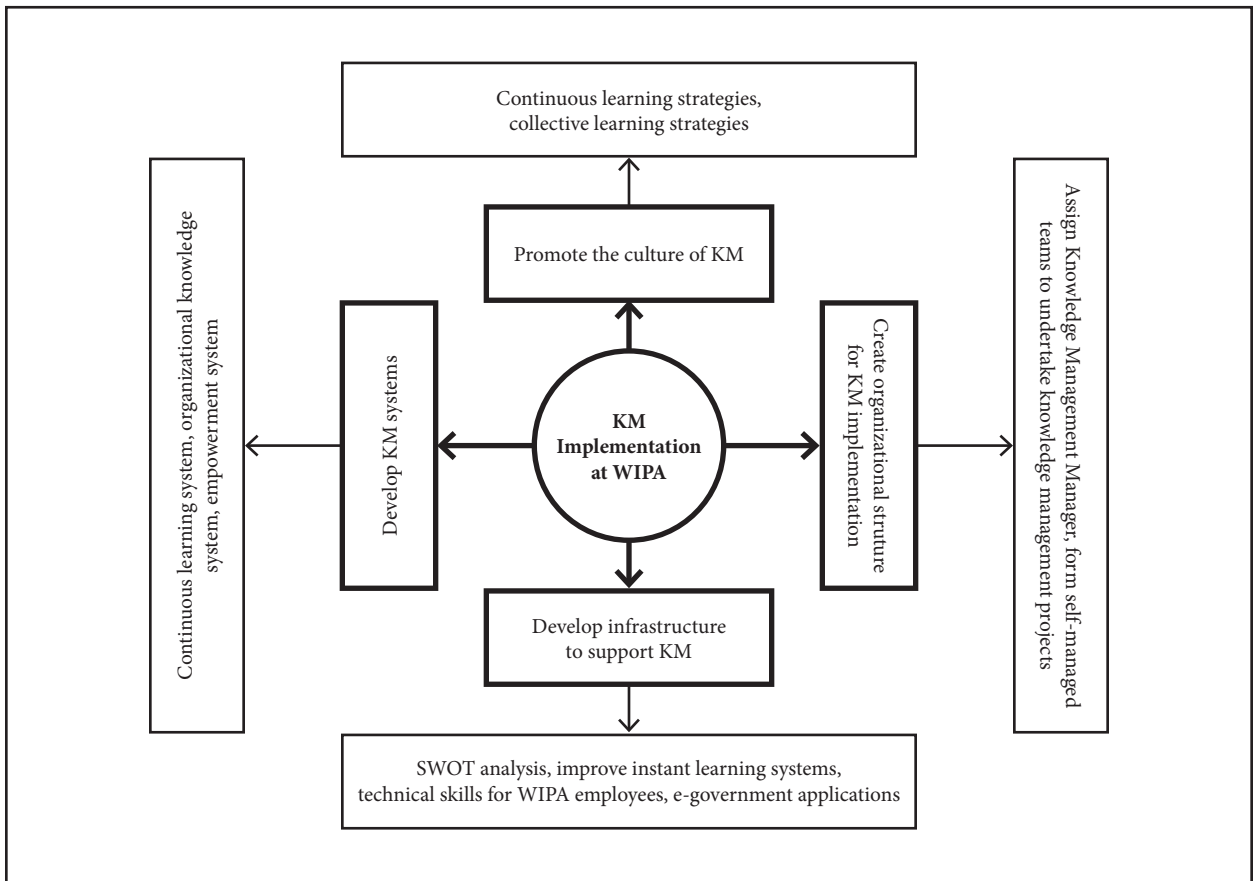
Figure 1. Knowledge Management Implementation Model at WIPA
Source: Abokhodiar (2013).

The sub-goals for the proposed model include: (1) promoting the culture of knowledge management at WIPA; (2) developing organizational structure needed for knowledge management implementation that includes administrative structure, systems, procedures, and policies; (3) developing technical infrastructure supporting the application of knowledge management that includes technical systems, software, databases, and management information systems; and (4) developing knowledge management systems.

Figure 1 displays the basic elements of the proposed model of knowledge management implementation at WIPA. The central circle represents the main goal, the four rectangles associated directly with that circle describe the sub-goals leading to the main goal, while the external boxes illustrate

the suggested strategies to achieve each sub-goal. In order to achieve the sub-goals of the proposed model, different strategies are suggested that take into account the current situation of WIPA relevant to implantation.

Promoting Knowledge Management Culture

In order to promote the culture of knowledge management at WIPA, learning and training strategy was developed. This strategy involves the delivery of a series of workshops, lectures, seminars, and conferences to educate our employees about knowledge management:

1. A workshop, "Towards Knowledge Management Culture," to introduce the basic concepts

of knowledge management. It may discuss the concept of knowledge, the concept of knowledge management, types of knowledge, the reasons why we need to manage knowledge, the benefits derived from the application of knowledge management at the individual and institutional level, concerns that may hinder the application of knowledge management, and the application requirements for knowledge management. The workshop will be conducted a number of times to give all the employees the opportunity to attend;

2. A workshop, "Obstacle of Knowledge Management Implementation." This workshop will focus on the fears and obstacles that may hinder knowledge management implementation;

3. A workshop, "Global and Local Experiences in Knowledge Management Implementation," from which the participants may draw some useful ideas and suggestions related to knowledge management implementation; and

4. A workshop, "Creative Ideas for Knowledge Management Implantation," that aims to think collectively in order to provide innovative ideas for the implementation of knowledge management in WIPA.

Developing Organizational Structure

This sub-goal is directed towards creating appropriate organizational structure that supports the application of knowledge management at WIPA. The following strategies will lead to achieve this goal:

1. Assigning a Knowledge Management Coordinator: The assignment of a knowledge management coordinator aims to carry out the responsibility of planning, organizing, and coordinating the implementation of knowledge management project at WIPA, as well as following-up progress in achieving the objectives of the plan; and

2. Forming Self-Managed Teams to Undertake Knowledge Management Projects: Diversity is required while forming the knowledge management teams. Members should be diverse on their majors, experiences, backgrounds,

and age. Thus, the members can benefit from their diversity while working on their projects. Suggested self-managed teams are a continuous learning team, a media education team, an exchange of knowledge and expertise team, an organizational knowledge development team, a services development team, and an idea bank team.

At a later stage, WIPA may need to establish a knowledge management department that reports directly to the General Director of WIPA. This department aims to develop plans and strategies that would support knowledge management processes.

Developing Technical Infrastructure

This sub-goal is related to the technical infrastructure that supports the application of knowledge management. The technical infrastructure requires technical systems, software, databases, and management information systems. To achieve this goal, the researcher suggests the following strategies:

1. Conducting a SWOT analysis for the current technical system to identify to what extent the knowledge management requirements are available;

2. Increasing the effectiveness of the instant learning system, which includes all the tasks and activities that employees need to learn;

3. Developing the technical skills of WIPA's employees at all levels to improve their abilities in using the internal and external networks to enable them to find, exchange, share, and transfer, as well as document knowledge; and

4. Expanding the application of an e-government project between WIPA and its customers, which would save a lot of time and effort spent in the routine procedures during the provision of services.

Developing Knowledge Management Systems

This sub-goal is related to the development of knowledge management systems that aim to promote

the processes of internal and external knowledge such as creating, documenting, sharing, and transferring, as well as maintaining the knowledge capital. These systems would lead to achieving excellence in performance at individual, group, and organizational levels. Since the IPA is considered a higher education institution, we need to develop two systems: academic knowledge system and organizational knowledge system.

Academic/Organizational Knowledge Systems

The academic knowledge system aims to develop the academic knowledge that is related to training programs, through the different processes mentioned above.

The organizational knowledge system aims to develop the current electronic database of organizational knowledge, such as roles, regulations, procedures, laws, statistics, and forms, to facilitate the process of documenting sharing and maintaining knowledge. The modified electronic database would help people to perform their tasks easily and effectively, with less time and effort. Moreover, it would enhance decisions making process and problem solving.

Applying the proposed model requires an action plan that includes the following:

1. The goals to be achieved;
2. The activities required to achieve each of the goal;
3. The time period needed for each activity;
4. The responsible (individual or team) who will take over each activity; and
5. The performance indicators to measure the progress in goal achievement.

Success Factors of the Proposed Model

In order to achieve the objectives of the proposed model successfully, we need supporting factors, including:

1. Support and encouragement from the top management;

2. Incentives for the staff who participate actively in the knowledge management projects;
3. Award for excellence in implementation of knowledge management; for example award for the best team or the best sector; and
4. Opportunities to participate in the knowledge management teams and projects for those who demonstrate the enthusiasm and willingness to work and bear the responsibility.

Expected Barriers of the Proposed Model

There are also several barriers that may arise that prohibit a successful implementation of the proposed knowledge management model. These include:

1. The attitude of competition rather than collaboration of activities; the "know-all" attitudes from the senior members; the feeling of being threatened by competency and skills of others;
2. Lack of awareness about the importance and benefits of knowledge management at individual and organizational levels;
3. Workloads of associates within organization and lack of time; and
4. Lack of sufficient incentives that encourage employees to participate in KM projects and to bear the workloads.

Conclusion

This article has provided a proposed model for the implementation of knowledge management at the Women's Branch of the Institute of Public Administration in the Kingdom of Saudi Arabia. The model was based on literature review related to knowledge management implementation, specifically in higher education institutions. There were several perspectives that made knowledge management implementation at WIPA an essential requirement, but the most important one is the current status of the workforce, which is characterized in the existence of a generation gap between faculty members. This may result in a loss of a portion of the accumulated knowledge and experiences of the intellectual capital of WIPA.

The proposed model aims to provide an integrated strategy of knowledge management implementation at WIPA by 2018. This goal was divided into four sub-goals. They are, to reiterate: (1) promoting the culture of knowledge management, (2) developing organizational structure needed for knowledge management implementation, (3) developing technical infrastructure that support the application of knowledge management, and (4) developing a knowledge management system.

In November 2013, the proposed model was approved by the General Director of WIPA. Moreover, a Knowledge Management Coordinator was appointed to take the responsibility of planning, organizing coordinating, and supervising the implementation process. Then, an action plan was prepared by the Knowledge Management Coordinator.

The implementation process is still in progress; however, a number of tasks have been accomplished successfully. To date, three introductory workshops have been conducted to promote knowledge management culture. Technical infrastructure has been activated and made ready to use by faculty members. And a team of two consultants from WIPA were assigned to document and reorganize the organizational knowledge and make it accessible to any staff member at any time.

To conclude, the success of the proposed model requires synergy and collaboration of efforts from each individual in accordance with the support and encouragement of top management. This proposed model of knowledge management implementation may help other higher education institutions who intend to apply knowledge management in their institutions, particularly with the lack of studies that deal with knowledge management implementation in Saudi Arabia.

References

Abdullah and Hema Date. 2009. "Public Sector Knowledge Management: A Generic Framework." *Public Sector ICT Management Review* 3 (1).

Babcock, Pamela. 2004. "Shedding Light on Knowledge Management." *HR Magazine* 49 (5).

Coukos-Semmel, Eleni. 2003. "Knowledge Management in Research University: The Processes and Strategies." Paper presented at the *Annual Meeting of the American Educational Research Association*, Chicago, Illinois.

De Brun, Caroline. 2005. "ABC of Knowledge Management." *NHS National Library for Health: Knowledge Management Specialist Library*. Available online at: http://www.fao.org; accessed December 2013.

Economic Commission for Latin America and the Caribbean (ECLAC). 2010. "Knowledge Management for Development: Towards a Practical Approach for the Caribbean." *Economic Commission for Latin America and the Caribbean*. Available online at: http://www.eclac.org; accessed December 2013.

Galbreath, Jeremy. 2000. "Knowledge Management Technology in Education: An Overview." *Educational Technology* 40 (5): 28-33.

Kidwell, Jillinda J., Karen M. Linde Vander, and Sandra L. Johnson. 2000. "Applying Corporate Knowledge Management Practices in Higher Education." *Educause Quarterly* 4 (1): 28-33.

Marquardt, Michael J. 1996. *Building the Learning Organization: A Systems Approach to Quantum Improvement and Global Success*. New York: McGraw-Hill.

Marquardt, Michael J. 2011. *Building the Learning Organization: Achieving Strategic Advantage through a Commitment to Learning*. Boston: Nicholas Brealey Publishing.

"National Strategy for the Transition to Knowledge Society." 2013. *Ministry of Economy and Planning of Saudi Arabia*. Available online at: http://www.mep.gov.sa; accessed 4 September 2013.

"Ninth Development Plan." 2010. *Ministry of Economy and Planning of Saudi Arabia*. Available online at: http://www.mep.gov.sa; accessed on 2 September 2013.

Nonaka, Ikujiro, and Hirota Takeuchi. 1995. *The Knowledge-Creating Company*. Oxford, UK: Oxford University Press.

Personnel Department. 2013. "Faculty Members' Statistics of 2013." *Institute of Public Administration in Riyadh, Saudi Arabia*.

Petrides, Lisa A., and Thad R. Nodine. 2003. *Knowledge Management in Education: Defining the Landscape*. Half Moon Bay, CA: Institute for the Study of Knowledge Management in Education.

Petrides, Lisa A., and Susan Guiney. 2002. "Knowledge Management for School Leaders: An Ecological Framework for Thinking School." *Teachers College Record* 104 (1): 1702-1717.

Seonwoo, Kim, Lee Changyon, and Park Yongtae. 2006. *The Implementation Framework of Knowledge Management System for Successful Knowledge Management: A Case of R&D Supporting KMS, Department of Industrial Engineering*. Seoul, Korea: Seoul National University.

Witt, Neil, Anne McDermott, Mike Peters, and Mark Stone. 2007. "A Knowledge Management Approach to Developing Communities of Practice Amongst University and College Staff." Paper presented at *ascilite 2007*, Nanyang Technological University, Singapore.

Yang, Chua Lee, and Maizatul Akmar Ismail. 2005. *Knowledgelink: The Knowledge Management System for Higher Learning Institutions*. Kuala Lumpur, Malaysia: University of Malaya.

Yeh, and Yaying Mary Chou. 2005. "The Implementation of Knowledge Management System in Taiwan's Higher Education." *Journal of College Teaching & Leadership* 2 (9): 35-42.