## **Building Tacit Knowledge Programs for B-Schools**

# Phillip V. Lewis Oklahoma Christian University

Organizations deal with both explicit (precise) knowledge—formal, systematic knowledge—and tacit (implicit) knowledge—insight, personal experience, and professional expertise. For tacit knowledge to work in a business school (B-school), a culture must be created for people to seek and share information, to be an enabler of both individual and organizational learning. B-schools must recognize themselves as knowledge creating organizations with a capability for action based on intellectual capital. This paper investigates a process for understanding comprehensive tacit knowledge programs and building tacit knowledge programs for B-schools. The theoretical goals are to (1) provide an overview of tacit knowledge, (2) determine how a B-school can expand its processes of identifying, capturing, and leveraging the knowledge it contains, (3) design an effectual tacit knowledge procedure for B-schools, (4) provide a blueprint for implementation of tacit knowledge programs, (5) look at possible challenges and critiques of tacit knowledge programs, and (6) recommend implementation plans.

#### INTRODUCTION

Knowledge has always been an important resource for business. In the early 1960s, Peter Druker was the first to use the term *knowledge workers* (1993, p. 5), but it wasn't until sometime in the early- to mid-1980s that *knowledge management* (KM) became an established discipline. By the mid- to late-1990s it had gathered the attention business administration and information systems faculty. Progressively it made its way into computer science, public policy, business strategy, and human resource management. By the late- 1990s to early-2000s the term *personal knowledge management* was introduced, referring to the management of knowledge at the individual level. Increasingly it began to overlap with organizational learning, although the focus shifted toward knowledge sharing and knowledge as a strategic asset (Maier, 2007).

Today the majority of organizational leaders in business support knowledge management activities if the outcome is "actionable information that relates to achieving strategic and operational goals and improved performance" (Calabrese & Orlando, 2006). Because the goal is actionable information within an organization, it is important to recognize that KM starts with people. Therefore, organizational leaders should "foster the means to enable their employees to use information resources efficiently and effectively" (Pieterse, 2006). The end result is a knowledge-creating organization; KM is an enabler of organizational learning (Sanchez, 1996).

If we could to agree that a "knowledge-creating *company* [emphasis author] is as much about ideals as it is about ideas" and that this agreement "fuels innovation" (Nonaka, 2007, p. 96), should we not be able to agree the same is true of a knowledge-creating *business school*? Yet, every year researchers and writers remind us that a business school (B-school) curriculum is in need of new design. They point out

that our system of education was designed over 100 years ago and thus is antiquated and outdated for today's students (Diamandis, 2015). Reliance on such a system makes it almost impossible to create new knowledge. Organizations that have attempted to create a new knowledge base, or bring multiple sources together, find it so overwhelming they decide to take the easy route and leave things the way they are (Allen, 2010).

The educational imperatives aimed at B-schools include both internal and external criticism. Faculty, chairs, and deans are told that critical management and leadership skills are not taught effectively; too much emphasis is placed on research which lacks relevance, there is a greater need for critical, analytical and integrative thinking, and graduates cannot communicate clearly. Other educational necessities include the need for recognizing organizational realities, a heightened concern for integration and coordination how all parts of an organization work together, more experiential learning, the gaining of a global perspective, and enhanced team building. The rising cost of education is also mentioned. The outcome for business education is predicted to be potentially stark: a death knell for business will be sounded if something doesn't change (McCrossan, 2011).

To function effectively, any organization must learn to develop structures for processing, creating, and managing knowledge. Because the information age has transformed the way organizations do business, we should ask whether the way information/knowledge is used in B-schools has transformed a student's educational value (e.g., return on investment [ROI]). Instead of thinking of organizations as information-processing machines, we should think of them this way: organizations (and especially Bschools) are knowledge-creating entities. Certainly it would be helpful if we understood the essence of knowledge creation and how knowledge is created through action and interaction (Nonaka & Toyama, 2003).

#### **PURPOSE OF THIS STUDY**

To ensure business professors continue to create actionable information for their B-schools, the aging factor must be considered. To illustrate: A Wells Fargo survey indicates that 34 percent of workers age 60 plus say they plan on working until they die or are too sick to work (Allington, 2015). The Bureau of Labor Statistics reports that 17.7 percent of people 65 and older are still working, compared with 11.7 percent in 1995 (Allington, 2015). The Transamerica Center for Retirement Studies found that a little over 40 percent of U.S. workers hope to cut back hours or transition to less demanding positions before retirement (Allington, 2015).

The University of Iowa Center on Aging has shown that 33 percent of faculty are 55 and older, and the rest of the workforce is 20 percent (Marcus, 2015). A different study reports that 60 percent of university and college faculty members plan to work past 70, and 15 percent say they will work until they're 80 (Marcus, 2015). TIAA-CREF says 36 percent of all workers plan to put off retirements past age 65, but university and college professors who plan to delay retirement is more than double that (Marcus, 2015). Is there a plan for ensuring long-time faculty will stay actively engaged in their academic pursuits, both research and teaching, and pass their knowledge on to not only students but also faculty?

Therefore, this paper investigates a process, first, for understanding a comprehensive knowledge management (KM) program and, second, for building a tacit knowledge program for B-schools. The theoretical goals for this investigation are to (1) provide an overview and background of tacit knowledge, (2) determine how a B-school can expand its personal/individual strategies and processes of identifying, capturing, and leveraging the knowledge contained within its academic entity, (3) design an effectual and tacit (not technological) knowledge procedure for B-schools, (4) provide a blueprint for implementation of such a tacit knowledge system, and (5) look at possible challenges and critiques of such a system.

#### A VIEW OF TACIT KNOWLEDGE

Knowledge can be viewed in several ways. Some think of it as information or data, but it has broader implications. To illustrate: "the basic economic resource is no longer capital, or labor, or natural resources, but *knowledge*" (Daft, 2001, p. 257). Similarly, "In an economy where the only certainty is uncertainty, the one sure source of lasting competitive advantage is knowledge" (Nonaka, 2007, p. 96).

What is *knowledge*? Knowledge is essentially the consciousness of an object—any fact or principle that may in any manner be reached by cognitive faculties; an implicit or explicit judgment, and truth or certitude (Knight, 2012). This much we know: knowledge is personal; it begins with an individual, not with technology. Human knowledge, however, can be transformed into organizational knowledge. When such a transformation takes place, this new knowledge "is the ultimate manifestation of an organization's competencies and the fruit of a knowing culture" (Hatten & Rosenthal, 2002).

What is *organizational knowledge*? One may view it as "information combined with experience, context, interpretation, reflection ... It is a high-value form of information that is ready for applications to decisions and actions within organizations" (Morrisey, 2005, p. 5). Or it may be defined as "all the knowledge resources within an organization that can be realistically tapped by that organization" (Frost, 2010). Organizations deal with both explicit (precise) and tacit (implicit) knowledge. See Table 1.

# TABLE 1 TWO APPROACHES TO KNOWLEDGE MANAGEMENT

Explicit	Tacit
Explicit knowledge is formal, systematic	Tacit knowledge is based on insight, personal
knowledge—knowing about.	experience, and professional expertise—
	knowing how.

Explicit knowledge provides high-quality, reliable, and fast information systems for access of codified, reusable knowledge; tacit knowledge channels individual expertise to provide creative advice on strategic problems (Daft, 2001). Explicit knowledge is codified and conveyed to others through dialog, demonstration, or media; tacit knowledge is personal experience, aptitudes, perceptions, and insights (Cognitive Design Solutions, 2003). Explicit knowledge is the tip of the iceberg—visible and expressible, whereas tacit knowledge is everything else—highly personal and hard to formalize (Nonaka & Takeuchi, 1995). This paper is concerned almost exclusively with tacit knowledge.

What is *knowledge management*? KM is the process of capturing, distributing, and effectively using knowledge (Davenport, 1994). Or, it may be thought of this way: KM is "a discipline that promotes an integrated approach to identifying, capturing, evaluating, retrieving, and sharing all of an enterprise's information assets. These assets may include databases, documents, policies, procedures, and previously un-captured expertise and experience in individual workers" (Duhon, 1998). Knowledge can be and should be managed in learning organizations, especially since knowledge can be acquired, created, and transferred across an organization. KM is a multidimensional process, and it can be explored along the management practices perspective, the information technology perspective, the organizational efforts perspective, and the development, supply, and adoption rate perspective (Wiig, 1997). KM could highlight the need for teaching managers-to-be the benefits of "acting upon this key notion: The expansion of cooperative behavior and the development of the individual are mutually dependent realities, and a balance of these two elements is needed for an organization to maintain vitality" (Mahoney, 2011). In addition, it can demonstrate how "the shared values, purposes, and customs of management" can be used to "build an enterprise that will help to meet the challenges of business today" (O'Connor, 2011).

For a tacit knowledge program to work in a B-school, an atmosphere/culture must be created in which it is perfectly safe for people to seek and share information and to challenge others. It requires the effective concurrent management of content, culture, process, and infrastructure (Yen, 2001). There are at

least three key reasons KM is important to success: it facilitates decision-making, builds learning by making it routine, and stimulates cultural change and innovation (Quast, 2012). The deliberate creation of new knowledge "is the ultimate manifestation of an organization's competencies and the fruit of a knowing culture" (Hatten & Rosenthal, 2002).

#### HOW BUSINESS SCHOOLS CAN EXPAND TACIT KNOWLEDGE

A professional KM program uses both explicit and tacit (implicit) knowledge. Since this paper is a study of tacit (personalized) knowledge for the classroom, processes for explicit KM will not be addressed—e.g., data warehousing, data mining, knowledge mapping, and electronic libraries. Human interaction is our primary concern—e.g., knowledge sharing (via dialogue), learning histories, storytelling, communities of practice, case studies, social network analysis, intellectual capital, and organizational learning.

A strategy to enhance tacit knowledge might be recognized as a "pull strategy." In business, especially marketing, a push-pull strategy often describes the movement of information between two entities. In one case, individuals can pull the information/knowledge they need; in another instance, a person can push information/knowledge toward others who may or may not recognize their need at the moment. Whichever tacit strategies/mechanisms are chosen, the goal is to connect people and to create an effective collective intelligence. A B-school that excels at tacit knowledge will find ways to encourage and facilitate continuous sharing and interaction among faculty, to be an enabler of both individual and organizational learning.

If a B-school implements an effective, winning tacit knowledge program, there could be an increase in faculty productivity, quality service, and "deliverable consistency by capitalizing on intellectual and knowledge-based assets" (Simmons, 2013). Additionally, it could reduce duplicated work in classrooms, leverage past experience, and track positive behaviors (Kondo, 2006). Likewise, KM might optimize voluntary self-motivated learning and development, facilitate tacit knowledge competencies, motivate collaborative knowledge-sharing behavior, and differentiate programs for different target groups (Pieterse, 2006).

## **BUILDING TACIT KNOWLEDGE PROGRAMS**

In the world of business, several individuals have provided what they consider to be the steps that will maximize the successful implementation of a tacit knowledge program. For one person, there are four steps required (Pieterse, 2006); for another, five steps (Kondo, 2006); for someone else, seven steps (Morrisey, 2005); for another, eight steps (Simmons, 2013); or for others, twelve steps (Calabrese, F. A. & Orlando, C. Y., 2006).

Individuals wrote about personal knowledge but chose directions such as creating a knowledge base (Firuta, 2014), the importance of research in creating knowledge (Greenfield, 2015), the need to educate to create new knowledge (Diamandis, 2015), or why tacit knowledge is important to the success of a company (Quast, 2012). More still seek to connect tacit knowledge to organizational learning (King, 2009), organizational performance (Rasula, Vuksic, & Stemberger, 2012), organizational culture (Allameh, Zamani, & Davoodi, 2011), or organizational development (Razaghi, Fazelidinan, & Safania, 2013). None of the above studies explore tacit knowledge for a B-school.

The current study identifies seven steps in a tacit knowledge procedure for B-schools. These phases are essential to augment positive implementation in an academic culture. In the steps outlined below, technology is taken as a given since it is already so relevant in the business world and marketplace.

#### 1. Lay A Theoretical Foundation and Recruit Deans' and Chairs' Support

A training and development module will need to be designed by those business faculty (or sponsors) who are the champions of a tacit knowledge program. The module might consist of identifying the key business drivers (i.e., preferably a rubric or metrics could be designed that would allow measurement on an ongoing basis) for development of a KM program and presenting the concepts, processes, and requirements of tacit knowledge. From a marketing perspective, once the business drivers are identified, it is time to target the tacit knowledge initiative and sell its benefits. A goal would be to promote the rewards of sharing knowledge and skills, which could also lead to possible needed changes in organizational culture. Attention also should be given to how to justify the investment of time and operational costs and how to get senior leadership on the side of tacit knowledge.

There are some who might argue that tacit knowledge is too subjective to determine value added. During the initial phase, time spent to refute such an argument by showing how value is created in the initiative will pay huge dividends for the future. Thus, getting the dean(s) and chairs to help sponsor and provide needed operational funds for the program are critical to its success. Junior faculty will be more likely to adopt and endorse the project if the leadership supports the concept, especially if there incentives designed to encourage tacit knowledge (e.g., performance evaluations, training program, and the view that participation is not additional work).

## 2. Assess and Analyze Current State of Knowledge and Competencies

A number of possibilities exist for assessing the current state of tacit knowledge in a B-school. There is the possibility that one or more faculty members may act as though it is in their best interest to hoard information; that way they can be perceived as an expert and indispensable. Therefore, such behavior will need to be changed. Three possible approaches for assessing and analyzing the B-school's current state of knowledge and competencies exist:

- One approach would be to perform a knowledge audit. An audit is an investigation of the knowledge needs and the interconnectivity among people in the B-school. It places faculty at the center of concerns, with the intent to find out what people know, what they do with the knowledge they have, and what knowledge is missing. A tacit knowledge audit could provide accurate identification, quantification, measurement, and assessment of the sum total of tacit knowledge.
- Another approach would be to use scenario planning to develop views of its competitive environment, and then develop a strategy to best position the B-school. Such an approach could help improve communication, knowledge sharing, problem-solving skills, and creativity. It also would help identify the business drivers and help align the tacit knowledge program strategy with the B-school's overall strategic purpose.
- A final approach would be to develop a knowledge map—a visual association of the dynamics at play within the B-school. Mapping indicates where the knowledge resources and assets are located, how these elements move through the various disciplines, where knowledge is currently being created, and where knowledge is needed and should be used.

The goal of all three approaches is to capture tacit knowledge as it exists now and not when a faculty member leaves an organization and has never taken the time to share it. Otherwise, some knowledge could be lost entirely. Realize, however, that there is no need to collect all of the information in the Bschool, especially if there is some information that doesn't align with the business drivers for the tacit knowledge program.

### 3. Establish Program Objectives and Design Key Features of the Program

The program's short- and long-term goals and objectives should be outlined to indicate the desired state as opposed to the current state. Short-term objectives address the reasons for changing to tacit knowledge, and long-term objectives communicate the big picture. Envision and articulate the end state. What are any problems that need resolution? What are the business drivers that will provide momentum? What are the justifications for beginning a tacit knowledge program? A high-level tacit knowledge program should have identifiable procedures and instructions throughout the program so all faculty will understand the work directives. A basic roadmap, indicating leaderships' support and commitment, should be made clear. Strategic objectives and features will help overcome any possible shortcomings. It could illustrate possible milestones, provide benchmarks, and lead to small wins during initial implementation to encourage continual motivation and momentum.

## 4. Recruit a KM Team and Link Knowledge and Behavior Expectations to People

To create the tacit knowledge team, the B-school will need to ask questions such as who has a particular knowledge, how does he or she work with it, who else needs that knowledge, can it be categorized so everyone that needs it can find it, who is most familiar with the content and resources— "information experts"—the tacit knowledge leader(s) have in mind, and who has the behavior expectations to make the program a success. Once those questions have been answered, a tacit knowledge team with a broad range of expertise that supports the character of knowledge work can be recruited and training and guidance can begin in earnest.

### 5. Design an Implementation Plan and Prepare for Change

Designing a tacit knowledge implementation plan is no small effort; but if a smooth on-ramp approach can be developed that captures knowledge, any perceived complexity can be overcome. That way each building block of knowledge will be balanced with the other building blocks of existing knowledge. The long-term goal would be to capture and manage knowledge with a recommendation for implementation.

Once such a design for implementation is prepared, there will be a need to plan for the possible changes it could introduce within the B-school. There are faculty who could resist the move toward tacit knowledge because it involves cultural changes in the way people work together, the way they currently share information with one another, or the way it threatens current norms and shared values. To overcome such negatives, follow almost any established approach for managing culture.

#### 6. Implement the Tacit Knowledge Program in Phases

Arrival at the point of implementation has been achieved. Building an implementation roadmap will help define how the tacit knowledge program will begin. The tacit knowledge champions should be prepared for the long haul. To implement the complete KM program in one or two semesters is probably rushing headlong into a situation that would be more agreeable to faculty and students if it were implemented in smaller, more manageable phases. Implementation in phases would also facilitate wider faculty adoption and provide the opportunity for identifying best practices. Incremental advances, if publicized, will indicate value and benefits and overcome any residual resistance. The benefits could be tremendous for the future expansion toward a total B-school tacit knowledge program. A roadmap can demonstrate milestones and dependencies, yield short-term wins, and strengthen future faculty and student support, as well as the support of senior leadership.

## 7. Measure Outcomes for Continuous Improvement

A tacit knowledge assessment program is the final step, and it would need to review the people, processes, technology, structure, and culture of the B-school, as well as measure the impact of the program. How the effectiveness of the program will be measured and how it will be compared to anticipated results will yield important outcomes for improvement of performance. The rubric or metrics designed earlier will help measure progress. At this point, it would be important to review both qualitative and quantitative components of the program. A balanced scorecard could be designed that will yield valuable insight into performance, quality, compliance, and value of the program—what is working and what is not working. Once this information is known, steps can be taken to improve the overall efficacy of the program for both the short- and long-term. The first assessment will also determine the success probability of the second phase of implementation as knowledge continues to be linked to people. The next assessment will point toward the need for continuous improvement and will be continued semester after semester or year after year.

## TACIT KNOWLEDGE CHALLENGES AND CRITIQUES

Tacit knowledge can be supported via Intranets, networks, and social media, particularly in global organizations, if an organization encourages dialogue and builds communities of practice. However, the benefits of tacit knowledge remain elusive for many organizations, and research on this topic in B-schools seems either to be elusive or nonexistent. There are any number of possible challenges and critiques for a B-school. Some tacit knowledge challenges could include the following:

- 1. Justifying the time and investment in tacit knowledge—quantitatively, a real options approach, or the traditional return on investment approaches
- 2. Obtaining senior management (deans and chairs) support—making a compelling business case for a tacit knowledge investment
- 3. Overcoming cultural hurdles to sharing—natural cultural aversion to sharing in some organizations
- 4. Encouraging employees (faculty) to use and share knowledge—training and development on the value of surrendering experiences and knowledge
- 5. Aligning practices with tacit knowledge strategy—designing a tacit knowledge system the synchronizes with the purpose/strategy of the organization (B-school)
- 6. Technology is a means to an end and not the end itself—tacit knowledge is a comprehensive strategy to improve sharing and retention
- 7. Potential for over-reliance on a tacit knowledge system—constraints of individuals' knowledge contained in the organization
- 8. Firms (B-schools) may collect the wrong information—the need to identify and disseminate the right knowledge
- 9. Project scope may be over-ambitious—a too-ambitious-organization may doom its roll out to failure
- 10. Measurement—measuring tacit knowledge's pervasiveness and impact as to its competency (adapted from Morrissey, 2005)

In addition to the above challenges, the champions of a tacit knowledge system might have to overcome critiques such as the following:

- 1. Does tacit knowledge really matter? Tacit knowledge has the potential for fostering innovation by encouraging the free flow of ideas and improving service to customers (students)
- 2. Is it good for a firm (B-school) to retain its corporate memory? Selectively forgetting or dwelling on failures encourages risk aversion and indecision.
- 3. Tacit knowledge benefits are too difficult to manage. Without measurement, there is no way to know if tacit knowledge is adding value (adapted from Morrissey, 2005).

Although agreement may possibly be reached on an understanding that tacit knowledge has different implications for different organizations and in different contexts, the future for tacit knowledge in B-schools is too valuable to ignore. The future holds many possibilities for new applications of tacit knowledge in organizations of all sizes, shapes, and flavors—especially B-schools.

## **CONCLUSION**

One of the difficulties of trying to establish a new theory such as tacit knowledge for B-schools is that most faculty fail to understand the essence of knowledge creation. They do not recognize themselves as knowledge engineers. Since the creation of knowledge is a synthesizing process, how can the B-school's environment and internal resources be synthesized? Similarly, because knowledge creation is a self-transcending process, how can a B-school reach out beyond the boundaries of its own existence? More research into a tacit knowledge program for B-school disciplines is needed. More research also is needed in how B-schools create knowledge.

This paper may be one of the first attempts to design a tacit knowledge program for B-schools. Although much remains to be done, a model now exists for expansion into all discipline and business

content areas of a B-school. The impact of tacit knowledge on business strategy has a large potential for positioning a B-school in a community and among colleagues, competitors, and parents and students. In the next ten years, a B-school education might no longer be on the stark/death knell list; the public could see a real transformation in how B-schools educate.

#### REFERENCES

- Allameh, M., Zamani, M., & Davoodi, S. M. (2011). The relationship between organizational culture and knowledge management. Procedia Computer Science, 3, 1224-1236. Retrieved from http://www.sciencedirect.com/science/article/pii/S1877050910005727.
- Allen, A. (2010). A simple guide to creating a knowledge base. East Bowral, NSW: Dev Logic Pty. Ltd. Retrieved from http://www.itsmfi.org/files/Simple%20Guide%to%20Creating%20a%20Knowledge%20Base%2 0-%20Allen.pdf.
- Allington, A. (November 29, 2015). As retirement nears, older employees seek options for reducing hours on job. The Oklahoman, 8C.
- Calabrese, F. A. and Orlando, C. Y. (2006). Deriving a 12-step process to create and implement a comprehensive knowledge management system. Emerald Group Publishing Limited. Retrieved from http://www.emeraldinsight.com/doi/abs/10.1108/03055720610703533.
- Cognitive Design Solutions. (2003). Explicit & tacit knowledge. Retrieved from http://www.cognitivedesignsolutions.com/KM/ExplicitTacit.htm.
- Daft, R. L. (2001). Organizational Theory and Design, 7th ed. Cincinnati, OH: Southwestern College Publication.
- Davenport, T. H. (March-April 1994), Saving IT's soul: Human centered information management. Harvard Business Review, 72, (2), 119-131.
- Duhon, Bryant (Septermber 12, 1998), It's all in our heads. *Inform*. Retrieved from http://www.kmworld.com/Articles/Editorial/What-Is-.../What-is-KM-Knowledge-Management-Explained-82405.aspx.
- Diamandis, P. H. (2015). We need to educate to create new knowledge. Retrieved from http://bigthink.com/in-their-own-words/we-need-to-educate-to-create-new-knowledge.
- Druker, P. (1993). Post-Capitalist Society. Oxford: Butterworth Heinemann, 5.
- Firuta, J. (August 8, 2014). How to create a knowledge base. Retrieved from http://www.livechatinc.com/blog/2014/08/how-to-create-a-knowledge-base/.
- Frost, A. (2010). Introducing organizational knowledge. Retrieved from http://www.knowledgemanagement-tools.net/introducing-organizational-knowledge.html.
- Greenfield, J. (2015). Research is creating new knowledge. Retrieved from http://c3metrics.com/researchis-creating-new-knowledge/.
- Hatten, K. (September/October 2002). Knowledge management: Creating a knowing culture. Retrieved from http://iveybusinessjournal.com/publication/knowledge-management-creating-a-knowingculture/.
- Hatten, K. & Rosenthal, S. (October 2002). Knowledge management: Creating a knowing culture. Retrieved from http://iveybusinessjournal.com/publication/knowledge-management-creating-aknowing-culture/.
- King, W. R. (2009). Knowledge management and organizational learning. Annals of Information Systems 4. New York, NY: Springer Science+Business Media.
- Knight, K. (2012). Knowledge. Retrieved from http://www.newadvent.org/cathen/08673a.htm.
- Kondo, F. (January 31, 2006). Five steps to a successful knowledge management initiative. Retrieved from http://www.itworld.com/article/2807348/enterprise-software/five-steps-to-a-successfulknowledge-management-initiative.html.

- Mahoney, J. (2011). Quoted in a review of O'Conner, E. (2011). Creating new knowledge in management: Appropriating the field's lost foundation. Retrieved from http://www.amazon.com/Creating-New-Knowledge-Management-Appropriatingebook/dp/B005Z24QKS.
- Maier, R. (2007). Knowledge Management Systems: Information and Communication Technologies for Knowledge Management, 3<sup>rd</sup> ed. Berlin: Springer.
- McCrossan, S. (January 13, 2011). Has Michael Gove sounded the death knell of business studies?" Retrieved from http://beta.tutor2u.net/business/blog/has-michael-gove-sounded-the-death-knellof-business-studies.
- Morrissey, S. (January 10, 2005). The design and implementation of effective knowledge management systems. Retrieved from http://mackinstitute.wharton.upenn.edu/wpcontent/uploads/2013/01/2005 2006 Morrissey Steve The Design and Implementation of Eff ective Knowledge Mgmt Systems.pdf.
- Nonaka, I. (July-August 2007). The knowledge creating company. *Harvard Business Review*. Retrieved from https://hbr.org/2007/07/the-knowledge-creating-company.
- Nonaka, I. & Takeuchi, H. (1995). Tacit and explicit knowledge. Retrieved from http://www.skyrme.com/kmbasics/ktacit.htm.
- Nonaka, I. & Toyama, R. (July 2003). The knowledge-creating theory revisited: knowledge creation as a synthesizing process. *Knowledge Management Research & Practice*, 1, (1), 2-10.
- O'Connor, E. (2011). Creating New knowledge in Management: Appropriating the Field's Lost Foundations. Stanford, CA: Stanford Business Books. Retrieved from http://www.sup.org/books/title/?id=18770.
- Pieterse, J. (2006). Four steps to develop a knowledge management competency (part 1). Retrieved from http://it.toolbox.com/blogs/enterprise-design/four-steps-to-develop-a-knowledge-managementcompetency-part-1-12233.
- Quast, L. (August 20, 2012). Why knowledge management is important to the success of your company. Retrieved from <a href="http://www.forbes.com/sites/lisaquast/2012/08/20/why-knowledge-management-">http://www.forbes.com/sites/lisaquast/2012/08/20/why-knowledge-management-</a> is-important-to-the-success-of-your-company/.
- Rasula, J., Vuksic, V. B., & Stemberger, M. I. (2012). The impact of knowledge management on organizational performance. Economic and Business Review, 4, (2), 147-168.
- Razaghi, M. E., Fazelidinan, F., & Safania, A. M. (2013). Study of relationship between knowledge management and organizational development case study: General directorate of you and sports of Mazandaran province. International Research Journal of Applied and Basic Sciences, 4, (1), 168-
- Sanchez, R. (1996). Strategic Learning and Knowledge Management. Chichester: Wiley.
- Simmons, R. (2013). 8 steps to implementing a knowledge management program at your organization. Retrieved from http://focus.forsythe.com/articles/281/8-Steps-to-implementing-a-Knowledge-Management-Program-at-Your-Organization.
- Yen, A. L. L. (December 25, 2001). Creating knowledge management systems. Retrieved from http://www.providersedge.com/docs/km articles/Creating KM Systems.pdf.