
International Forum
Vol. 15, No. 2
October 2012
pp. 57-70

FEATURE

**Knowledge Creation and Sharing Practices Model
For Extension Offices: The De La Salle
University-Dasmariñas Experience**

Maria Theresa D. Gochuico

***Abstract.** Knowledge is a vital resource in any organization that ultimately affects performance and effectiveness. Thus, the importance of knowledge creation and sharing practices is magnified nowadays, and is seen as an important aspect in community development that facilitates improved community development programs and projects. An extension office or unit is a micro learning organization within an organization. Its knowledge creation and sharing practices are unique because it works for and with communities and institutions while adhering to the vision-mission, policies, and standards of the higher educational institution it belongs to. The knowledge creation and sharing practices of the Lasallian Community Development Center (LCDC), the extension arm of De La Salle University-Dasmariñas (DLSU-D), was analyzed and caused the creation of a framework that may be used by other higher educational institutions in helping extension offices analyze its own knowledge creation and sharing practices.*

Knowledge is a vital resource in any organization that ultimately affects performance and effectiveness. Awad and Ghaziri (2004, p. 21) describe knowledge as a process of taking information and transforming it into action. Information cannot be transformed into full knowledge without understanding the context in which it is being utilized. Uriarte (2008) further explains that knowledge tends to be self-contextualizing—the context of an organization determines knowledge assets and needs. Therefore, when context changes, it is necessary to make knowledge updated and useful to realize an organization's vision, goals, priorities, undertakings, and plans.

An extension office or unit is a micro learning organization within an organization. Its knowledge creation and sharing practices are unique because it works for and with communities and institutions while adhering to the vision-mission, policies, and standards of the higher educational institution it belongs to. As an extension office, LCDC (Lasallian Community Development Center) is mandated to implement community development programs by engaging in various knowledge creation and sharing activities within and outside the University. Over time, these knowledge creation and sharing activities have become practices which faculty members observe.

Three Frameworks of Knowledge Creation

In this paper, LCDC's knowledge creation and sharing practices were analysed in two contexts: at the organizational and individual levels. This study used two frameworks—Karl Weick's (2000) Theory of Organizing and Nonaka's (1998) Model of Knowledge Creation and Transformation—to explain the two contexts. Weick's (2000) theory works on the organizational level which focuses on achievement of organizational goals and tasks. His theory explains organizing as an important facet of achieving determined goals and tasks (Cragan & Shields, 1998, p. 249; Griffin, 2000, pp. 242-245; Pace & Faules, 1994, p. 55; Weick, 2000, pp. 3-4). Nonaka's (1998) model, on the other hand, focuses on the members of the organization. His model describes the members of the organization as those who work for the accomplishment of goals. This generates the organization needs (Awad & Ghaziri, 2004, pp. 96-97; Nonaka, 1998, pp. 28-29).

These two frameworks, when combined, best explain the Lasallian concept of social development intervention which covers institutional and societal dimensions. This means that community development programs must fulfill the goals or mission of the Institution (Institutional dimension), and must start with the context of the underprivileged sector of society (societal dimension) (Guiding Principles of the Philippine Lasallian Family, 2009, p. 22).

Weick's Theory of Organizing

Weick (2000, p. 3) explains that organizing is a process of reducing ambiguity which involves ongoing efforts to transform infrastructure assets into actions and structures. This theory of organizing uses communication as an ongoing process of human organizing and provides a rationale as to how people organize (Littlejohn, 1996, pp. 314-315; Tucker in Uriarte, 2008, p. 30; Weick, Sutcliffe, & Obstaid, 2005, p. 413).



Figure 1. Weick's theory of organizing.

Knowledge creation and sharing practices are seen at various communication levels in an organization. This reality often moves organizations to determined norms which guide workers in establishing and accomplishing organizational tasks and goals. The objectives of an organization aid in ascertaining tasks, outputs, and resources to prioritize and use. Weick (in Griffin, 2000, pp. 242-245) identifies three important phases in organizing: enactment, selection, and retention.

Members of an organization define the environment (enactment), admit certain aspects and reject some aspect of the information (selection), and then save this information for organization members to remember (retention) (Weick, as cited in Griffin, 2000, pp. 242-245; Weick, Sutcliffe, & Obstfeld, 2005, p. 414). Knowledge creation starts when members define a situation and engage in environmental scanning. Knowledge sharing activities also take place as members of an organization determine what aspects of information are needed or not needed to achieve the organization's goals and mission. Eventually, these decisions impact what information forms part of the organization's knowledge repository.

Nonaka's Model of Knowledge Creation and Transformation

Organizational knowledge creation is the capability of an organization to create new knowledge, disseminate it throughout the organization, and embody it in products, services, and systems (Nonaka & Takeuchi, 1995, p. viii). Further, Nonaka (1998) contends that knowledge creation does not solely imply the analysis and use of any obtained factual or objective information because "it depends on tapping tacit knowledge and often highly subjective insights, intuitions, and hunches of individual employment and making those insights available for testing and use by the company as a whole" (p. 24). To elucidate this idea, Nonaka (as cited in Awad & Ghaziri, 2004) coined the terms *tacit knowledge* and *explicit knowledge* as the two main types of human knowledge. Tacit knowledge is highly personal and primarily resides in the human brain and therefore difficult to communicate to others. Explicit knowledge, on the other hand, is documented, so it is easily communicated and shared.

Nonaka (1998, p. 28; as cited in Awad & Ghaziri, 2004, pp. 96-97) presents four basic patterns for creating knowledge in an organization: tacit to tacit communication, tacit to explicit communication, explicit to explicit communication, and explicit to tacit communication. Figure 2 presents Nonaka's Knowledge Creation and Transformation concept much like a window with four panes, each representing one pattern of knowledge creation and transformation. No pattern is superior to the other, and no pattern is to be used more than the other. The size of the panes depends on how an organization uses and develops its human-centered and infrastructure assets. Instrumental to knowledge creation and sharing is the personal commitment by members of the organization to accomplish determined goals, and their ability to identify and see themselves as an integral part of the organization, thus sharing its priorities and goals.

Knowledge creation and transformation is both a social and an individual process (von Krogh, Ichijo, & Nonaka, 2000, p. 8). It is a social process because knowledge can be learned from other people and environments or contexts that an individual comes in contact with. At the same time, knowledge creation is an individual process because the learning process is personal.

Effective knowledge creation and transformation depends on shared space that fosters emerging relationships (von Krogh, Ichijo, & Nonaka, 2000, p. 4). In an organization, knowledge creation and transformation is best facilitated when members of the organization are open to sharing their knowledge with one another. Knowledge can die or become outdated, and can also be useless when owned by just a single person or only a group of people.

Tacit to Tacit (Socialization)	Tacit to Explicit (Externalization)
Explicit to Tacit (Internalization)	Explicit to Explicit (Communication)

Figure 2. Nonaka's model of knowledge creation and transformation.

Proposed Knowledge Creation and Sharing Practices Model

Combining Weick’s Theory of Organizing (2000) and Nonaka’s Knowledge Creation and Transformation Model (1998) best explains the knowledge creation and sharing practices of an organization (see Figure 3). Figure 3 shows the two *environments*—internal (DLSU-D) and external (NGO’s)—that were considered in this paper, following the mandate of social development interventions and the nature of an extension office. In the *enactment* phase, LCDC faculty members initially give meaning to environments using the infrastructure assets (the institution’s management philosophy, culture, processes and systems) as a foundation. One such asset is the *Principles of Lasallian Social Development*, which states that Lasallian institutions must work in ‘solidarity with people and institutions that share the conviction in denouncing . . . and eliminat[ing] . . . unjust practices and social structures’ that aggravate the situation of the poor, “promoting the participation of the underrepresented, and implementing other life-giving interventions” (Guiding Principles of the Philippine Lasallian Family, 2009, p. 23).

In the *selection* phase (see Figure 3), knowledge items are reduced; faculty members admit and reject other aspects of the knowledge items based on social development priorities, vision-mission, and goals. Communication among LCDC faculty members and with partners helps in defining and selecting valuable knowledge items. During the *retention* phase, the identified knowledge items are documented and become part of LCDC’s knowledge repository.

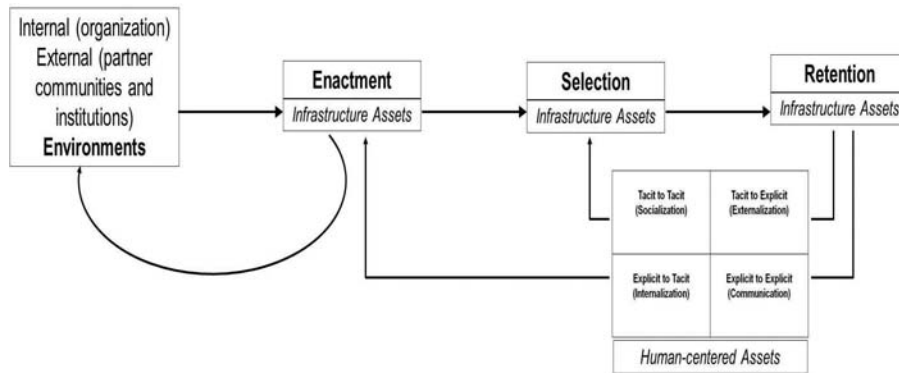


Figure 3. Knowledge creation and sharing practices model for extension offices.

Representing reciprocal exchanges of knowledge is Nonaka's knowledge creation and transformation practices (see Figure 3), as developed by LCDC faculty members to gain the substantial knowledge items required for program and project management. Nonaka and Takeuchi (as cited in Bouthillier & Shear, 2002; Bouthillier & Shear, 1995, p. 8) claim that tacit knowledge may be transmitted through social interactions or socialization, and made explicit through externalization—although they agree with the idea that tacit knowledge is somewhat hidden and cannot be articulated easily. Knowledge flows simultaneously within and outside the organization, and knowledge is created and transformed at various levels.

Faculty members usually share new knowledge with colleagues through small talks. During these small talks, key knowledge items are transferred from one person to another. This phenomenon is called *socialization*, or *tacit to tacit* knowledge creation and transformation which usually takes place between people in meetings or team discussions and are usually learned through observation, imitation, and practice (Nonaka, 1998, p. 28, Awad & Ghaziri, 2004, p. 96).

Externalization, or *tacit to explicit* knowledge creation and transformation, on the other hand, happens when individuals share knowledge with the project development team and develop new innovative approaches based on tacit knowledge developed over the years (Nonaka cited by Bouthillier & Shear, 2002; Nonaka, 1998, p. 29). Externalization usually happens during program or project rotation, where proper turnover of documents by outgoing project officers to new project officers are observed.

During rotation, knowledge items reflected in documents are helpful for newly assigned project officer. Documents created by faculty members in the course of their work reflect knowledge items gained in community development work which can be accessed in case such knowledge item is needed to address a concern. *Communication*, or *explicit to explicit* knowledge creation and transformation happens when an individual can also combine discreet pieces of explicit knowledge into a new whole (Nonaka, 1998, pp. 28-29). Explicit knowledge items within an organization's repository of knowledge may be consulted and cited to form an innovative knowledge present in research. In this phase, explicit knowledge is easily accessed and distributed within the organization. A possible off-shoot of externalization is *internalization*, or *explicit to tacit* knowledge creation and transformation in which a person tries to understand and assimilate the knowledge items that he or she encountered or exposed to. It is expected, of course, that individuals generate new tacit knowledge from explicit knowledge items.

Background and Design of the Study

As the lead unit of De La Salle University-Dasmariñas (DLSU-D) in implementing community development programs, the Lasallian Community Development Center (LCDC) engages itself in various knowledge capturing and sharing activities to respond to the University's mission of social transformation. LCDC facilitates relevant and innovative community programs with the different sectors of the University and its partner communities (LCDC Mission, 2006). The Center initiates programs and projects that help the marginalized sectors in Cavite, Laguna, Batangas, Rizal, and Quezon (CALABARZON) in coordination with various local government units and non-government organizations.

Since its creation on May 19, 1989, LCDC has committed itself to observing, analyzing, and responding to the immediate concerns of the times through advocacy, research, education, livelihood, health, and other community development programs and projects designed for the holistic development of its partner communities; particularly the youth at risk, which is the charism of St. John Baptist de La Salle, whose notable work in the field of education was named by the Roman Catholic Church as the patron saint of teachers. This mission is defined as bringing significant social change by working in solidarity with progressive elements (Guiding Principles of the Lasallian Social Development, 2009, p. 22-23). In practice, this means a preferential option for those who are marginalized—those whom De La Salle understood as most in need of God's compassion (Animo La Salle, 2011, p. 20).

Unlike other offices or departments in any higher educational institution, extension offices like LCDC are unique because the mandate and outputs are measured by engagement in community development activities. Knowledge creation and sharing practices are unique because these offices work for and with communities and institutions while adhering to the vision-mission, policies, and standards of the higher educational institution they belong to.

How knowledge is used within LCDC and with its partners is vital in the achievement of sustainable community development endeavors. Due to the dynamic nature of LCDC, it is important to focus on its knowledge assets at the organizational and individual levels to establish its 'knowledge health.' This study implemented a knowledge audit to identify LCDC's knowledge creation and sharing practices in accomplishing its mission. Specifically, this study aimed to:

1. Determine LCDC's knowledge creation and sharing practices; and
2. Propose a model for knowledge creation and sharing practices for an extension office

This study employed the descriptive research design in auditing selected LCDC faculty members and partner NGO's to develop a knowledge creation and sharing model. The model looks at the knowledge creation and sharing practices within LCDC or among faculty members and outside LCDC or between LCDC's faculty members and partner NGO's.

Instrument and Data Gathering Procedure

The study employed two sets of survey questionnaires—one for faculty members and one for partner NGO's—which were emailed and/or hand-delivered to the target respondents. The survey sought to audit the knowledge assets of LCDC, and identify knowledge creation and transformation practices. The survey questionnaire was first validated and pilot-tested with three former faculty members and two current faculty members of LCDC. The faculty members made minimal comments for the improvement of the questionnaire, such as in the sequence of the questions.

Research Respondents

This study involved LCDC faculty members from AY 1997-1998 to 2009-2010; particularly, those who had served or are serving LCDC for at least three years. The target respondents were 54 faculty members who satisfied the criteria; five of whom were involved in the pilot testing. Of the 49 remaining target respondents, 30 respondents replied, constituting 71% of the population.

Among the respondents, 13 are still working for LCDC while 22 are either working for a different department in the University or are affiliated with a new company or institution. Fifteen respondents had worked for LCDC for three to five years, while 15 had worked for nine years. Two respondents had served for 10-12 years, and three respondents had served for more than 12 years.

The partner NGOs who were surveyed, on the other hand, were those affiliated with LCDC from the 1997-1998 academic year to 2009-2010, with at least three years of partnership with LCDC at the time of this research undertaking. The questionnaire was given to 23 partner NGOs, and 5 of these NGOs answered the questionnaire during pilot testing. Ten replied, which is 56% of the population.

Results

Knowledge Assets

It is difficult to discuss knowledge creation and sharing practices of an organization without discussing knowledge or intangible assets. Individuals create and use knowledge in an organization; and this is vital because people are

hired for the knowledge they have and are expected to translate this knowledge into beneficial outputs for the organization. Organizations ‘invest’ in people by training them in their respective areas of expertise and expect a ‘return’ of such investment from the people they have trained. An organization’s knowledge assets may be divided into many categories; however, this study only includes two categories—human-centered and infrastructure assets; discussed in the context of LCDC.

Based on the audit, significant knowledge assets were identified; both at the organizational and individual levels, and knowledge creation and transformation practices were observed. Figure 4 shows these assets and practices using the conceptual framework developed by the researcher for the purpose of this study. As with the more generic Figure 3, the infrastructure assets in Figure 4 include Environments, Enactment, Selection and Retention, with specific applications to DLSU-D. These infrastructure assets are what provides the context for the members of the organization to work with each other. Human-centered assets, in line with the previous model, are the qualities that make up the members of the organization (see Figure 4).

Human-centered assets. Human-centered assets comprise the collective expertise, creative and problem solving capability, leadership, and entrepreneurial and managerial skills embodied by employees of an organization (Brooking, 1999, p. 21). Human-centered assets in LCDC are the education and work related knowledge of its faculty members. Faculty members are also called program or project officers because they facilitate community development programs and projects.

Tertiary, graduate, or postgraduate degrees are important and considered in an educational institution like DLSU-D. Also, education is important in placing a faculty in a specific program or project. Of those surveyed, 20 of the respondents have a graduate degree, 13 respondents have a bachelor’s degree, and two have post-graduate degrees. The respondents come from various educational backgrounds; specifically, business management, communication, political science, nursing, and midwifery. Only two respondents had community development-related background with a master’s degree in social development.

Although most faculty members do not have formal educational background on social development or community development, their formal educational background has become the basis of program or project designation. Two participants with health-related background claimed that their education is important in their work as clinicians in the University’s community clinic because they assess simple health conditions, make referrals, and organize health information campaigns in partner communities through the help of partner organizations and institutions in the same field.

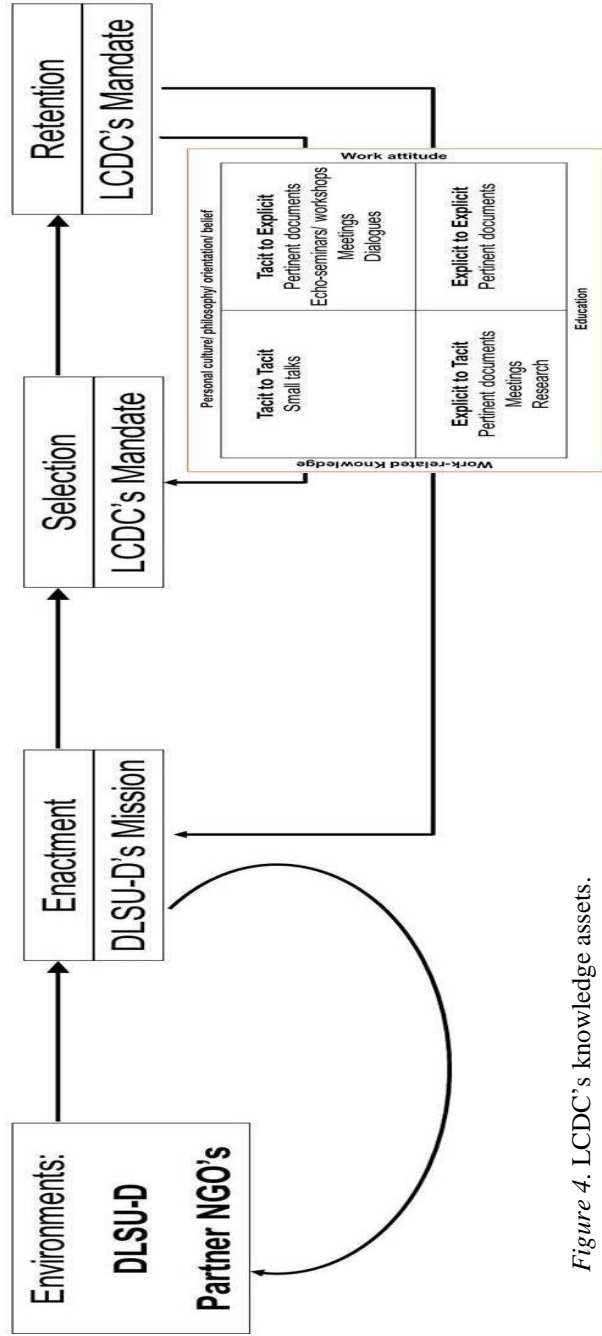


Figure 4. LCDC's knowledge assets.

LCDC faculty members are able to construct unique knowledge items through communication or knowledge exchanges with partner communities and institutions. Through the survey, the respondents identified significant knowledge items gained through community engagement as community development work, community-based communication, and project management. These knowledge items are not ones learned from books but knowledge that radiates from the experience of working with partner communities and institutions. Talisayon and Gois (2010, p. 5) state further that knowledge used at work is more often the knowledge gained from work.

Infrastructure assets. Brooking (1998, p. 62) describes infrastructure assets as the skeleton and glue of the organization which provide strength and cohesion between its people and its processes. These include management philosophy, corporate culture, and management processes. Based on the audit (see Figure 4), the identified significant infrastructure assets of the Center are DLSU-D Vision-Mission, and the LCDC mandate. Nearly all of the respondents (28 of 35) believe that social transformation is LCDC's mandate which is also reflective of DLSU-D's vision-mission.

LCDC's Knowledge Creation and Sharing Practices

In Figure 4, Nonaka's (1998) knowledge creation and transformation model was used to identify LCDC's knowledge creation and sharing practices. Knowledge creation and sharing practices within LCDC are eminent during ordinary conversation (tacit to tacit knowledge creation and transformation) and program or project rotation (tacit to explicit, explicit to tacit, and explicit to explicit knowledge creation and transformation).

Regardless of formal education, work-related experience, or special training, faculty members resort to ordinary conversations for knowledge sharing activities. All faculty members share new knowledge with colleagues, though this is generally done through small talks (40.35%) and seldom through echo-seminars (8.77%). It is important to note that the respondents were enticed to share knowledge in informal set-ups like small talks. Contributory to this is the availability of facilities, like faculty lounge, coffee corner, workroom, conducive to knowledge sharing activities. The faculty lounge is used for this purpose, according to 25 respondents.

Knowledge creation and sharing practices are also evident during program or project rotation which is done annually as claimed by 86% of the respondents. When placed in a program or project, the project officer is expected to adjust to the work load and learn-on-the-job to generate work-related knowledge which Brooking (1998, p. 51) notes as knowledge that comes as a function of understanding and doing a job in a particular field. Though seen as a part of

LCDC's process, rotation has certain effects on LCDC's partnerships and documentation of programs and projects.

Partnerships. In terms of external partnerships, 53% of the partnerships were initiated by LCDC, and 37% of these of these partnerships were done based on NGOs needs. A total of 35% of partner NGOs posited that they were not affected by LCDC program or project rotation; but 14% were affected by the coordination and 21% by scheduling of activities. Partner NGOs attested that there was an apparent effect with a partnership when they actually have to communicate with the Center for implementation of specific activities, such as alternative learning sessions, blood drives, voter education, and other capacity-building activities.

Document management. In all, 62% of respondents confirmed that key documents are kept through hard and soft copies. The identified key documents created by faculty members in the course of their work are concept papers, annual plans, and evaluation reports. When kept and documented properly, these documents are helpful for newly-assigned project officers or to any other member of the Center who might need these documents. During rotation, knowledge creation and sharing are observed in the form of turnovers of pertinent documents and proper orientation of outgoing project officers to new project officers. Documentation of community development activities is important for transferring project officers' personal experience and knowledge to new project officer and/or LCDC administrators. Bouthlier and Shear (2002), and Housel and Bell (2001, p. 5) stress the importance of documentation and claim that without such, the lessons of history are lost, knowledge disappears, an organization's memory is reduced, and the organization's effectiveness and productivity is decreased.

Knowledge creation and sharing practices between LCDC and its partners, on the other hand, are evident in *tacit to explicit* activities during training seminars/workshops and meetings/dialogues. A total of 58% of the respondents claimed that knowledge sharing is LCDC's objective for partnership. According to LCDC faculty members, knowledge sharing with partners is done through training, seminar and meetings, and seldom through research. This is similar to the partner NGO's claim that knowledge sharing with LCDC is done through training and seminars, and meetings

Knowledge generated from various knowledge creation and sharing practices become essential parts of the knowledge repository, to eventually become explicit knowledge. Every member of the team is expected to use such knowledge in making decisions in the course of their work.

Conclusion

Organizations, in general, operate in an environment that sets the backdrop of its vision-mission, philosophy, culture, and processes - collectively known as infrastructure assets. In this study, two environments (external environment or

partner NGO's and internal environment or DLSU-D) were considered because LCDC's community development endeavours are in line with achieving the vision-mission, philosophy, culture, and processes of DLSU-D. This phenomenon is best described in Weick's (2000) Organizing Theory.

In the enactment phase, LCDC faculty members give meanings to the environment using human-centered assets as foundation. These meanings are then contracted and reduced during the selection phase. Communication among faculty members, partner communities, and institutions helps in substantiating gathered information from the enacted environment. During the retention phase, faculty members document newfound knowledge for LCDC's reference.

At the reciprocal exchanges of the environments are enactment, selection, and retention according to Nonaka's knowledge creation and transformation processes. These assets are substantial knowledge of the project officers of LCDC required for program/project management and the development of key knowledge items in the course of their work. It is important to know whether LCDC's organizing systems make the key knowledge items explicit and available for use.

The knowledge creation and sharing model for extension offices proposed in this study focuses on knowledge creation and sharing practices within the extension office, and with partner communities and institutions. Extension offices like LCDC are unique because their mandate and outputs are measured by engagement in community development activities. In this case, knowledge creation and sharing practices are unique because they work for and with communities and institutions while adhering to the vision-mission, policies, and standards of the higher educational institution.

References

- Awad, E. M. & Ghaziri, H. M. (2004). *Knowledge management*. Upper Saddle River, NJ: Pearson Education.
- Bouthillier, F. & Shear, K. (2002). Understanding knowledge management: the need for an empirical perspective. *Information Research* 8(1), paper no. 141. Retrieved from <http://informationr.net/ir/8-1/paper141.html>
- Brooking, A. (1998). *Intellectual capital: Core assets for the third millennium enterprise*. Manila, Philippines: National Bookstore.
- Brooking, A. (1999). *Corporate memory: Strategies for knowledge management*. Manila, Philippines: National Bookstore.
- Cragan, J. F. & Shields, D. C. (1998). *Understanding communication theory: the communicative forces for human action*. Boston, MA: Allyn & Bacon.

- Griffin, E. (2000). *A first look at communication theory* (4th ed.). New York, NY: McGraw-Hill Companies.
- Housel, T. & Bell, A. (2001). *Measuring and managing knowledge*. New York, NY: McGraw-Hill Companies.
- LCDC Mission Statement. (2006). LCDC Faculty Members SY 2005-2006.
- Littlejohn, S. (1996). *Theories of human communication* (5th ed.). New York, NY: Wadsworth.
- Nonaka, I. & Takeuchi, H. (1995). *The knowledge-creating company*. New York, NY: Oxford University Press.
- Nonaka, I. (1998). The knowledge creating company. *Harvard Business Review on Knowledge Management*, 69(3), 27-38.
- Philippine Lasallian Family. (2000). *Animo La Salle 2011: Living the Lasallian spirit in the Philippines today*. Manila, Philippines: Author.
- Philippine Lasallian Family. (2009). *Guiding principles of the Philippine Lasallian family* (2nd ed.). Manila, Philippines: La Salle Provincialate.
- Talisayon, S. & Gois, A. (n.d.) *Lessons learned meeting. KM Executive Brief No. 2*. Center for Conscious Living Foundation. Retrieved from <http://apintalisayon.wordpress.com/lessons-learned-meeting/>
- Uriarte, F. (2008). *Introduction to knowledge management*. Jakarta, Indonesia: ASEAN Foundation.
- von Krogh, G., Ichijo, K., & Nonaka, I. (2000). *Enabling knowledge creation: How to unlock the mystery of tacit knowledge and release the power of innovation*. New York, NY: Oxford University Press.
- Weick, K. (2000). *Making sense of the organization*. Berlin, Germany: Author.
- Weick, K., Sutcliffe, K., & Obstfeld, D. (2005). Organizing and the process of sensemaking. *Organization Science*, 16(4), 409-421. Retrieved from <http://portal.acm.org/citation.cfm>

Maria-Theresa Gochuico, PhD
Academic Service Faculty
De La Salle University-Dasmariñas,
Dasmariñas, Philippines
mdgochuico@dlsud.edu.ph