The Emerging Academic Discipline of Knowledge Management

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ABSTRACT

Although knowledge management (KM) has gained worldwide recognition as an important strategic imperative, its integration into academia has lagged. A review of the literature, as well as an examination of information systems (IS) curriculum models, was performed to determine how KM related courses are being integrated. The analysis revealed that KM is still not considered appropriate as an integral component of the undergraduate IS curriculum; rather it is more prevalent in optional courses or those covering advanced topics, and integrated into the curriculum at the graduate level. The sluggish adoption of KM into mainstream academia is countered by an increasing demand for KM professionals in the marketplace. Examination of several web resources reveals the emergence of new professional categories and job titles related to KM and a growing certification industry. The article also presents a preliminary analysis of KM related doctoral dissertations, written over the last two decades. Findings reveal a steady growth in the number of such dissertations, as well as a widening array of research topics. Data on degree type, nation of origin, and academic discipline are presented along with ideas for future research in this area.

Keywords: Knowledge management, KM, MIS curriculum models, academic discipline, dissertation research

1. INTRODUCTION

Entering into its second decade, the field of knowledge management (KM) has started to coalesce into a unique discipline. While there may be a few that denigrate the field as being nothing more than a rehash of information management (Wilson, 2002), KM has outlived the point at which most management fads start to decline (Ponzi and Keoenig, 2002). Indeed, there does not seem to be any waning of interest in knowledge management.

Knowledge management encompasses much more than information systems (IS) management. According to Dr. Yogesh Malhotra, a well-known pioneer in the field and founder of the BRINT Institute, knowledge management

> *"... refers to the critical issues of organizational adaptation, survival and competence against discontinuous environmental change. Essentially it embodies organizational processes that seek synergistic combination of data and information processing capacity of information technologies, and the creative and innovative capacity of human beings."* (www.brint.com).

A survey of CEOs of U.S. companies found that knowledge management was judged to be one of the most important trends in today's business environment, surpassed only by globalization (MacGillivray, 2003).

Knowledge management initiatives have been implemented at some of the world's largest and well known corporations, such as Accenture, Cable & Wireless, DaimlerChrysler, Ernst & Young, Ford, Hewlett Packard, and Unilever (Rao, 2005). Knowledge management is not only being adopted at the corporate level; it is being embraced by international development institutions and national governments (Jarboe, 2001; Malhotra, 2003). As rapid advances in information and communication technology (ICT) drive the world further towards a global, 'knowledge economy', companies and countries alike must adapt to an ever-changing and increasingly competitive landscape. The leveraging and management of knowledge assets is seen by many to be the most critical factor in obtaining and sustaining competitive advantage (Grant, 1996; Stewart, 1997).

In spite of the general acceptance of the concept, there is still a lack of consensus with regard to the definitions and underlying precepts of KM. Jones (2006) stresses the fact that KM is not merely about information systems and information technology, that it relies heavily on social and cultural components, and that it overlaps with a number of other disciplines (organizational development, innovation, competitive intelligence). Dalkir (2005) refers to at least 100 published definitions of knowledge management, stressing the multidisciplinary nature of the field of study and the need to consider different perspectives (business, cognitive science, or technology) when defining the discipline. Much

work still needs to be done to formalize the theoretical frameworks, models, and procedures that are necessary to serve managers and which are critical to solidify KM's position as a unique and valuable discipline. In order for this to happen, KM needs to become more infused into the academic curriculum. Chen, Chiu and Fan (2003), professing that KM will be the focus of business administration in the 21st century, call for colleges and universities to develop adequate channels for the training of KM professionals. At a recent international conference on intellectual capital, leading KM gurus (including Karl Sveiby, Leif Edvinsson, and Hubert Saint-Onge) made the plea for academia to "pick up the KM torch", that is, to promote more doctoral research in the area and to provide more formalized education and training. This was suggested as an alternative to leaving KM strictly to practitioners, who use it to solve problems by the 'seat of their pants' (Dalkir, 2005. p. 16).

2. THE KM PROFESSION

If knowledge management is not merely repackaged information management or information technology, the KM professional will require a broader set of skills. Todd and Southon (2001) suggest the following skill-sets for the knowledge management professional: (1) people skills – networking, sharing, team work, (2) cognitive skills – analysis, synthesis, oral and written communication, (3) management skills – change management, human resources management, project management, (4) organization and business skills – policy formulation, vision, marketing, (5) information processing skills – recording, storage and retrieval, content management, (5) information technology skills – data base design, web publishing, use of groupware software. Calling for a blend of technical and business skills in management is certainly nothing new. Indeed, the concept of the 'hybrid manager' (O'Conner and Smallman, 1995), popular several years ago, encapsulates the same notion.

It is tempting to question whether the concept of the 'KM professional' actually exists in the minds of hiring managers and whether there is a significant market for individuals with such skills. The amount of activity on the most popular on-line job boards certainly would suggest that both are the case. For example, a search on Monster.com, with the keywords 'knowledge management', resulted in over 1000 hits, each representing an active position. A cursory examination of several of the job listings provides insight into the type of individual currently in demand and highlights the fact that KM is a multifaceted discipline requiring a balanced mix of technology, business and people skills.

1. **Knowledge Management Manager** - Serves as an internal consultant to the organization leading the active sharing of knowledge and managing the collection, sanitization, and organization of that knowledge (case studies, pitch materials, industry overviews, etc.) to support the development and efficiency of the organization. The Manager will work to develop and maintain standards in the knowledge base, and will be responsible for upkeep of the knowledge management center.
2. **Knowledge Management Specialist** - Design, develop, market and manage the knowledge resources that help the firms litigators deliver effective and efficient work product for our clients. Work closely with our litigation attorneys, legal support staff, software programmers and financial analysts to manage a variety of KM projects.
3. **Knowledge Management Specialist** - Supports the organizational Knowledge Management Lead to formulate and define system scope and objectives for knowledge management projects. Assists clients in defining knowledge content, organization, and key words. Prepares detailed specifications for knowledge management programs to include process definition for knowledge capture and management. Has technical knowledge and responsibility for knowledge management applications and analyses. Oversees the design of knowledge management user interface features, site animation, and special knowledge management features including enhancing the look and feel of the organization's online knowledge management screens. Works with organization web designers, data managers and programmers to support and implement the organization's knowledge management program. Requires an understanding of knowledge management principles, procedures and processes. Responsible for supporting the work of the organization's knowledge management team.
4. **Knowledge Specialist** - Responsible for managing the build of the Common Repository. Recommend and design methods and processes for maintaining and updating the knowledge capital resources. Investigate and monitor other project knowledge bases and any sharing as appropriate. Ensure the quality and integrity of documents published. Provide management reporting on knowledgebase content (updates, participation etc.). Develop and enhance the processes for collecting and organizing content.
5. **National Knowledge Management Project Manager** - Manage multiple project teams to identify KM needs throughout the US firm and to explore process-based solutions to address those KM needs. Work closely with designated project sponsors and other stakeholders to define approach and scope of desired capabilities. Provide significant input to or create documented business requirements to capture requested capabilities. Partner with business sponsors and industry and/or functional customers to identify and prioritize requirements. Participate in discussions of capabilities, deployment timeframes and trade-off decisions. Manage projects to identify and/or implement enhancements to existing KM processes. Perform project management tasks for multiple projects simultaneously - including managing resources, issues, communications, budgets and pilots for projects.

Some of the better known companies in search of KM talent were Ernst & Young, PricewaterhouseCoopers, Computer Sciences Corporation, IBM and General Dynamics. In addition, a large number of smaller consulting and recruiting firms were advertising open positions.

KnowledgeRecruit, part of a London and New York based executive search focusing specifically on KM related placement (http://www.tfpl.com/permanent_recruitment/clients/knowledgerecruit.cfm), outlines the following KM position profiles: (1) **Chief Knowledge Officer** - lead in the development of corporate culture, processes, infrastructure and information resources to facilitate the creation and utilization of corporate knowledge, expertise and information to create competitive advantage and support creativity. (2) **Knowledge Department Manager** - develop the understanding of knowledge assets and needs in all divisions and manage and promote the effective supply and use of knowledge, (3) **Knowledge Coordinator/Information Specialist** - manage the effective supply and use of internal information and its integration into the corporate knowledge base, (4) **Knowledge Management Analyst** - provide information management support to knowledge teams and to undertake analytical research to support business teams, (5) **Knowledge Coordinator** - manage the provision of value added research to sales departments, (6) **Knowledge Administrator** - manage the acquisition and provision of external business information and to identify and maintain links with corporate sources of business information.

Another sign indicating a market for KM professionals is the proliferation of certification programs offered by non-academic, professional organizations. Some of the vendors in this space are: (1) **International KM Institute** (http://www.kminstitute.org/index.php) offering the Certified Knowledge Manager (CKM) certification, (2) **Knowledge Management Professional Society** (http://kmpro.org) offering the Certified Knowledge Manager (CKM) and the Master Certified Knowledge Management Professional (MKMP) certifications, (3) **Global Knowledge Economics Council** (http://www.eknowledgecenter.com/certification courses/CertTracks.htm) offering the Certified Knowledge Manager (CKM), Certified Knowledge Environment Engineer (CKEE), and Certified Knowledge Economics (CKE) certifications, and (4) **Knowledge Management Consortium International** (www.kmci.org) offering the Certificate in Knowledge and Innovation Management (CKIM) and the KMCI Advanced Certificate Program. As in other certification programs, these claim to teach the most essential skills needed in today's job market (within a one to five day seminar), and promise to put the aspiring professional on the 'fast-track' to career advancement.

3. ACADEMIC KM PROGRAMS

Not surprisingly, the literature relating to knowledge management as an academic discipline is scarce. Most of the existing references frame the discussion in the context of the graduate as opposed to undergraduate curriculum. Ruth, Theobald and Frizzel (1999) were perhaps the first researchers to address the diffusion of KM into the academic curriculum. Pointing to the delay that often exists between industry practice and university courses, the authors lament the severe shortage of KM related courses in universities. To help alleviate this problem, and to hasten the assimilation of KM into mainstream curricula, the authors offer guidelines derived from their early forays into KM education at the International Center for Applied Studies in Information Technology (ICASIT) at George Mason University. They argue that KM is particularly appropriate as an interesting graduate level elective because it is primarily about upper management as opposed to technology issues, it presents ample opportunity to examine failures as well as successes, and it can be presented from multiple perspectives. The recommended core ingredients of a graduate level KM course are composed of the following modules: (1) knowledge creation, (2) history of KM theory and concepts, (3) importance of trust, (4) strategic issues in KM, (5) knowledge coding, (6) hardware/software/systems, (7) KM ROI/evaluation, and (8) international issues.

Chaudry and Higgens (2001) analyzed the offerings of 37 knowledge management courses offered by universities in Australia, Canada, Singapore, UK and USA. They found that most offerings were in MIS or MBA programs within business, computing and information schools and that most were at the graduate level. The authors also scrutinized the contents of the KM courses, narrowing the curriculum areas into five main themes: (1) foundations, (2) technology, (3) process (codification), (4) applications, and (5) strategies. Those KM courses offered in business schools had more of an emphasis on such topics as intellectual capital, measurement, and business cases, while those in IS focused more on knowledge repositories and the development and management of content.

To date, the most exhaustive study on KM in the academic curriculum comes from Sutton (2002), who identified 79 KM graduate programs offered by 47 institutions around the world. Programs were categorized according to the following disciplines : (1) business, commerce, management, (2) artificial intelligence, cognitive science, computer science, computer systems, information systems, software engineering, (3) information and media, information management, information science, library and information studies, (4) information technology, systems engineering, (5) knowledge science, (6) continuing education, other. Analysis of the data revealed that the largest number (37%) fell in category 3, which is predominantly made up of graduate schools of Library and Information Science. Other findings in this study were that the U.S had the majority of programs (followed by the UK and Australia/New Zealand), and that there was a shortage of undergraduate degree programs.

Several articles describe examples of integrating KM into the curriculum at a particular college or university. Reichgelt, Zhang and Price (2002) consider Knowledge Management as a major concentration (along with Project Management, Systems Development and Support, Telecommunications and Network Administration, and Web and Multimedia Foundations) in the IT baccalaureate program at Georgia Southern University. The track includes courses in data management, decision support systems, information organization and retrieval, and knowledge discovery and data mining.

Argamon, et al. (2005) describe the extension of the undergraduate Computer Science program at the Illinois Institute of Technology to embrace KM related themes. The development of a new specialization option in Information and Knowledge Management Systems (IKMS) is described. The IKMS specialization is composed of core areas in text

analysis, data mining, information retrieval, and database systems and consists of five upper-level undergraduate courses. The capstone course in the sequence requires students to work on team-based projects to build realistic knowledge management applications, combining the development of new software systems with the use of existing technologies.

Al-Hawamdeh (2005) stresses the interdisciplinary nature of KM and argues for a balanced and practical approach to developing a KM curriculum. The author describes the development of a graduate program in KM at the Nanyang Technological University in Singapore, an effort motivated in large part by a strong demand for KM professionals in that country. Among the courses included in the program were: Learning Organization, Business Intelligence, Electronic Records and Document Management, Electronic Commerce and Knowledge Management, Knowledge Discovery and Data Mining, Human Capital Management, and Knowledge Management Measurement.

Steenkamp and DeGennaro (2004) detail an initiative to develop a doctoral program in Management in Information Technology (DMIT). Knowledge management is included as one of several possible topics that would receive in depth analysis within a course entitled *Advanced Topics in IT*. The class deals with the development of an enterprise wide knowledge management framework and includes exploration of KM methodology and architecture.

George Mason University's ICAST maintains a site called KM in Academia which includes information on course materials, degree programs, research centers, syllabi, teaching case studies, and training providers (http://www.icasit.org/km/academia/index.htm). Of the programs referenced (predominantly in British, Australian, Canadian and American universities), 18 were at the Masters level, 5 were doctoral programs, and 10 were certification programs. No undergraduate programs were listed.

4. KNOWLEDGE MANAGEMENT AS PART OF THE IS CURRICULUM

In the current analysis, several information systems (IS) curriculum models were inspected to determine the extent of KM's presence. Information systems integrates information technology solutions and business processes to meet the needs of businesses and other organizations. Alternative names commonly used to describe degree programs related to IS are: Management Information Systems, Computer Information Systems, Information Management, Business Information Systems, Informatics, Information Resources Management, Information Technology, Information Technology Systems, Information Technology Resources Management, Accounting Information Systems, Information Science and Information and Quantitative Science (Gorgone et al., 2002). Curriculum models are meant to guide the development of courses that address the marketplace and which are academically sound. This section describes IS curriculum models and the extent to which they include the concept of KM as a component.

The Organizational & End-User Information Systems (OEIS) Model Curriculum (Hunt, 2004) is sponsored by the Organizational Systems Research Association (OSRA). The purpose of the model, which focuses exclusively on the undergraduate curriculum, is to specify the competencies needed by today's new breed of information technology specialists. The OEIS model recognizes that many of today's jobs are focused on end-users, as outsourcing continues to move many software development jobs off-shore. Thus, the model addresses programs geared to prepare undergraduates for entry and mid level, non-programming positions such as software trainer, PC support specialist, technology coordinator, Web designer, helpdesk administrator, network analyst, process improvement manager and director of online learning. Although not specified as a core course within the model, KM is given the status of an optional, senior-level course. Entitled *Collaborative Technologies and Knowledge Management*, the course provides an introduction to group decision support systems (GDSS), electronic meeting management, web-based groupware applications, and other collaborative technologies. In addition, the course delves into the theoretical background of knowledge management and organizational learning. The recommended breakdown of content for this course is as follows:

1. Communication, organizational and instructional factors (30%) - covers interpersonal, group and organizational factors that promote technology based collaboration.
2. Business process analysis and meeting facilitation (30%) - planning and facilitation of meetings to analyze existing and needed business processes, set goals and objectives, make decisions, and devise plans for implementing instructional and business decisions
3. Technology implementation (20%) – participation in group activities using collaborative technologies, planning and establishment of electronic, web-based meeting agenda, facilitation of meetings using groupware technology tools
4. Knowledge Management (20%) – KM trends and issues; challenges in building KM systems, the knowledge management life cycle; knowledge creation, transformation, and architecture.

In a study by Hunt et al. (2004), alumni from universities and colleges in the U.S. were asked to assess the level of importance of the different OEIS Model Curriculum objectives on a 5-point Likert scale (5 = critical importance; 1 = no importance). The survey questions relating to KM were scored rankings of 3.4 and 3.5. While not an overwhelming endorsement, the rankings indicate a positive perception of the relevance of the KM related objectives in the OEIS model.

The IRMA/DAMA Model Curriculum (Cohen, 2000) describes an international information resources management curriculum for a four-year undergraduate level program. Its intent is to "prepare students to understand the concepts of information resources management and technologies, methods, and management procedures to collect, analyze and disseminate information throughout organizations in order to remain competitive in the global business world". Knowledge management is explicitly acknowledged as a technical component of information resources in today's organization, and is included under the category of Information Systems Architecture. However, there is no

further mention of KM and it is not included in any of the suggested core courses.

Another model, the Informatics Curriculum Framework for Higher Education (ICF-2000) (Mulder and Weert, 2000), contains no reference whatsoever to knowledge management or anything closely related to it. A more conspicuous omission is evident in the IS-2002 model (Gorgone et al., 2002), a collaborative effort of three predominant professional organizations in the field of IS and computing: Association for Computing Machinery (ACM), Association for Information Systems (AIS), and Association of Information Technology Professionals (AITP). The IS-2002 has become the primary IS curriculum model and is updated every few years to reflect the changing requirements of IS professionals.

The MSIS2006 Curriculum initiative is an update of a guideline established by the AIS and ACM for course inclusion in the IS graduate curriculum (Gorgone et al., 2005). The latest iteration, updated from the previous one in 2000, has incorporated some new content areas which are more in line with the rapidly changing business environment. Major areas in the new guideline include: (1) business processes, (2) globalization, (3) impacts of digitization, (4) human-computer interactions, and (5) emerging technologies and the inclusion of several new business, IS management and technology courses to reflect these broad areas. Although there are no courses specifically labeled Knowledge Management, the topic itself figures prominently in several of the proposed course offerings (Emerging Technologies and Issues, and Enterprise Modeling). See Table 1 for a summary of the models evaluated.

Level	Curriculum model	Inclusion of 'knowledge management'
Undergrad	IRMA/DAMA - 2000	KM acknowledged as a technical component of Information Resources Management under the category of Information Systems Architectures. No further mention of KM as an integral part of the curriculum.
	OEIS-2004	Included in the Collaborative Technologies and Knowledge Management senior level (optional) course.
	IS-2002	No mention of KM
	ICF-2000	No mention of KM
Graduate	MSIS-2006	Included as a core topic in the courses Emerging Technologies and Issues and Enterprise Modeling

Table 1 - KM in IS Curriculum Models

5. ACADEMIC RESEARCH IN KNOWLEDGE MANAGEMENT

Another way to gauge the acceptance of KM into academia is to examine the number and type of dissertations being written that deal with some aspect of KM. Sutton (2002) only found 15 doctoral dissertations that in any way referenced KM between 1980 and 2001. The ICASIT site (http://www.icasit.org/km/academia/list_of_phd_dissertation.pdf) does a bit better, with 137 dissertations between 1991 and 2002. Table 2 reveals a marked increase of dissertations starting in 1998.

Year	Frequency	Percent
2002	31	.23
2001	26	.19
2000	28	.20
1999	21	.15
1998	13	.9
1997	6	.4
1996	3	.2
1995	1	.1
1994	5	.4
1993	0	0
1992	2	.1
1991	1	.1
Total	137	100.0

Table 2 – KM Dissertations
Adapted from ICASIT (www.icasit.org)

Perhaps no one has picked up the KM torch more vigorously than Michael Stankosky, who launched the KM doctoral graduate program at George Washington University (GWU). The program, which offers a D.Sc. degree, has become a major producer of KM dissertations over the last few years. The KM curriculum, developed by Stankosky and his colleagues, is based on a four-pillar framework of KM composed of (1) leadership/management – stresses the need for integrative management principles and techniques; influenced primarily by systems thinking, (2) organization – deals with the operational aspects of KM drawing mainly from systems engineering principles and techniques, (3) learning – deals with organizational behavioral aspects such as collaboration and knowledge sharing, (4) technology – deals with the information technology that supports or enables KM strategies. A number of dissertations, written between 2000 and 2004 at GWU, have recently been compiled and published in book form (Stankosky, 2005).

5.1 Analysis of dissertation database

To supplement the existing data, an analysis of KM related dissertation records taken from the database *Dissertations and Theses* (available via PROQUEST DIRECT) was performed. A query with the term 'knowledge management' in the Citation and Abstract field resulted in 327 dissertations written between 1981 and 2004. Figure 1 shows the distribution of dissertations by year. As in the ICASIT data, we see the number of dissertations start to increase dramatically in 1998.

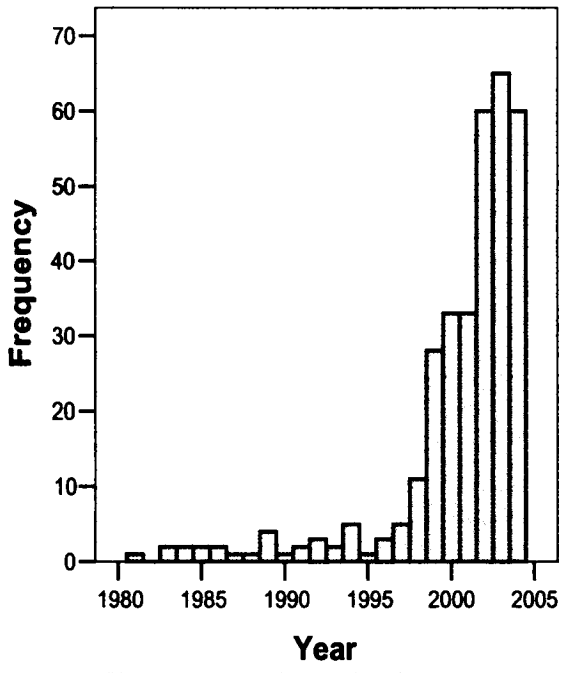

Figure 1 – KM Dissertations/Year

Country	Frequency	Percent
U.S.A.	269	82.3
Canada	15	4.6
Finland	7	2.1
Sweden	7	2.1
Spain	6	1.8
South Africa	5	1.5
China	4	3
Switzerland	3	.9
The Netherlands	3	.9
Norway	3	.9
United Kingdom	2	.6
Belgium	1	.3
Poland	1	.3
Australia	1	.3
Total	327	100.0

Table 3 – KM Dissertations/Country

In agreement with previous studies, this study confirms that KM is being researched by universities across the globe. Table 3 reveals that U.S. universities are by far the most prolific producers of KM related doctoral dissertations.

It is evident from the data on degree type, that KM is a dissertation topic appropriate for many different terminal degrees. The PhD has the highest representation, with 82.3% of the sample (see Table 4). The terminal degree in education, the Ed.D, comes in a distant second, with the D.Sc. (skewed due to Stankosky's prolific group at George Washington University) and the DBA right behind.

Degree	Frequency	Percent
Ph.D	257	78.6
Ed.D.	20	6.1
D.Sc.	13	4.0
D.B.A.	12	3.7
Dr.	7	2.1
D. Phil.	4	1.2
Dr. ing.	3	.9
Dr. Tech.	2	.6
Dr.sc.tech	2	.6
D.I.B.A	1	.3
D.P.S	1	.3
D.P.A.	1	.3
Educat.D	1	.3
Fil.dr.	1	.3
D.M	1	.3
Psy.D	1	.3
Total	327	100.0

Table 4 – KM Dissertations/Degree

The diversity of degree types should be expected. Knowledge management draws from many different disciplines and can be applied to numerous areas of inquiry. Dalkir (2005) specifies the following areas which are directly related to KM: (1) organizational science, (2) cognitive science, (3) linguistics, (4) information technology (knowledge-based systems, document and information management, and database technologies), (5) information and library science, (6) technical writing and journalism, (7) anthropology and sociology, (8) education and training, (9) storytelling and communication studies, (8) collaborative technologies (groupware, intranets, extranets, portals, and other web technologies).

Stankosky (2005) provides the following list of KM study impact areas, again demonstrating the multidisciplinary nature of the field: systems theory, risk management assessment, intelligent agents, management of R&D, Decision Support Systems, modeling and simulation, data mining / data warehousing, Enterprise Resource Planning (ERP), business process engineering, systems analysis, systems engineering, leadership, ethics, communications theory, organizational psychology, visualization, groupware, virtual networks, strategic planning, Management-by-Objectives, Total Quality Management, management theory, MIS, database design / DBMS, data communications and networks.

To gain a better understanding of which areas are being addressed in KM academic research, an analysis of the dissertations' primary subject areas was performed. The *Dissertations and Theses* database has a field called Subject which includes one or more descriptive words, originally entered by the dissertation author. For this analysis, only the first-entered word was used and pegged to one of five categories derived from a common taxonomy of academic disciplines (http://en.wikipedia.org/wiki/Academic_disciplines). The majority of dissertations (80.1%) were in the Professions/Allied Sciences category (see Table 5). Humanities/Arts and Social Sciences were also represented, with 9.8% and 8.9% respectively.

Discipline	Frequency	Percent
Professions / Allied Sciences	262	80.1
Humanities and Arts	32	9.8
Social Sciences	29	8.9
Math and Computer Science	3	.9
Natural Science	1	.3
Total	327	100.0

Table 5 – KM Dissertations/Academic Disciplines

Table 6 shows a breakdown of the subcategories within the Professions/Allied Sciences category. Approximately 67% of the dissertations are within the Business sub-discipline. Education and Engineering ranked 2nd and 3rd with 14.1% and 8.8% respectively.

The finding that KM is being addressed most prominently in business and management related research is certainly reasonable, especially since IS topics are also included in this category within this taxonomy. Drilling down further into the Business category was not attempted at this point, since a deeper level of analysis is reserved for a future study. The semantic value of these discipline categories is rather limited and only provides a very broad view of the topical content of KM dissertations. The actual abstracts, in which the authors summarize the essence of the research, would be a much more valuable resource to evaluate. In a future study, the narratives will be coded using a qualitative software package, and analyzed to uncover a deeper understanding of the themes and theoretical frameworks used.

Sub Discipline	Frequency	Percent
Business	176	67.2
Education	37	14.1
Engineering	23	8.8
Public affairs and community service	10	3.8
Health sciences	5	1.9
Journalism and mass communications	4	1.5
Library and information sciences	4	1.5
Design	2	.8
Family and consumer science	1	.4
Total	262	100.0

Table 6 – KM Dissertations/Professions and Allied Sciences

6. CONCLUSION

In today's turbulent business environment drivers such as globalization, technological innovations, and an ever-changing work force, make the capture and codification of corporate knowledge a number one priority and a strategic imperative. Over the past two decades, the field of knowledge management has emerged to address this need, creating a new career path, along with certifications offered by professional organizations. The present study was undertaken to determine how academia is buying in and incorporating KM into the curriculum. A review of the literature and web resources revealed that KM is primarily being offered at the graduate level, although undergraduate and university-based certification programs are also present to a lesser extent. IS curriculum models were also examined. In general they have not caught up with industry, and poorly reflect the need for inclusion of KM as a core curricular item. While knowledge management has not seen rapid adoption in the classroom, it has become a popular topic for doctoral research. An analysis of dissertations between 1981 and 2004 revealed a surge in KM dissertations being written starting around 1998. Analysis of existing descriptive data revealed that most KM dissertations are from American universities, written to obtain a PhD terminal degree, and related to business topics.

There is a need for further research to understand the adoption of KM as an academic discipline. A more exhaustive and comprehensive analysis needs to be done to better understand the types of courses and certifications being offered around the globe. As previously stated, the same dissertation dataset used in this study will be mined for underlying thematic content. Much can be derived from doing a similar type of analysis on syllabi to determine which topics, cases and resources are being incorporated into KM courses. Those in the KM education business need to share 'best practices' in much the same way as those in any other industry. Understanding how KM is being taught and researched will help educators hone their craft as the discipline matures.

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