

Preface

Knowledge Management and Higher Education

Although the use of knowledge management (KM) principles in the business sector has been the focus of many books, seminars, and professional development workshops, the application of KM in higher education has been heretofore only partially examined. This book addresses the social aspects of KM that are largely ignored in the literature. Using various social science perspectives, the authors provide critical analyses of KM in higher education, with an emphasis on unintended consequences and future implications. The objectives of this book are to examine the strengths and weaknesses of KM, and to provide examples of the social effects of the implementation of KM in the field of higher education. Many of the conclusions drawn from the research presented in this volume will be of interest to not only those concerned with the future of higher education, but also to professionals who work in other highly-institutionalized and information-intensive fields, such as health care, government, and private business.

Organization of the Book

Knowledge Management and Higher Education: A Critical Analysis has been organized into three sections. Section I is titled, “The Application of Knowledge Management in Higher Education” and explores both the conceptual and practical issues of KM within postsecondary settings. In the first chapter, titled, “The Political Economy of Knowledge Management in Higher

Education,” I discuss several theoretical constructs that can aid in understanding the adaptation and application of knowledge management techniques in higher education settings. These theories allow us to consider dimensions of power and influence within the workplace, which can become embedded within technological structures.

In Chapter II, Lisa Petrides and Lilly Nguyen introduce the promises and potential pitfalls of KM in “Knowledge Management Trends: Challenges and Opportunities for Education Institutions.” Utilizing their extensive background in consulting for educational institutions, Petrides and Nguyen guide us through the ways in which KM must be adapted from the business culture to best suit an academic implementation. In particular, they find that higher education institutions can benefit from understanding that KM is more than just data management; it is a cycle that includes data, information, knowledge, and most importantly, action.

To complement the information learned from Petrides and Nguyen, John Milam presents a systems approach of academic knowledge in “Ontologies in Higher Education.” Dr. Milam provides us with an understanding of the higher education sector from a structural perspective by discussing the various classification schemas and taxonomies used to distinguish academic institutions and their components. The chapter also provides useful guidelines for developing academic ontologies, an overview of software that is currently being used in this capacity, and a discussion of future trends in the classification of higher education institutions, processes and outputs.

Section II, “Administrative Issues and Knowledge Management” contains three chapters that discuss the socio-technical concerns of information management in higher education. In Chapter IV, my co-authors (George McClellan, Gary Cruz, and Richard Wagoner) and I present a forecast of the future of higher education in “Toward Technological Bloat and Academic Technocracy: The Information Age and Higher Education.” We draw upon economic and social theories to explain the rise in technocratic leadership in academic organizations and to predict the role of these leaders in the future. We intend the chapter to be thought-provoking and cautionary in that we point out that an increase in IT managerial positions and investments in the technological infrastructure necessary to accommodate KM strategies are not without cost, both organizationally and financially.

Building upon the ideas expressed in the previous chapter, Richard Wagoner presents an example of KM implementation in Chapter V, “We’ve Got a Job

to Do—Eventually: A Study of Knowledge Management Fatigue Syndrome.” Dr. Wagoner presents compelling reasons why technological solutions are not always easily implemented within a higher education setting. Using interview data and other qualitative methods, he explores the efficacy of a new enterprise computer system from the point-of-view of the academic staff members who are the primary users. He finds that the concept of “knowledge management fatigue syndrome” aids in the understanding of how a campus-wide IT overhaul can stall in mid-implementation and result in both infrastructural and organizational adaptations to the technological needs of the system.

As knowledge management has been closely tied to the institutional research function of higher education, José Luis Santos’ chapter titled, “Institutional Research (IR) Meets Knowledge Management (KM)” is a significant contribution to this volume. In an era of increased attention to accountability measures, institutional research offices are faced with presenting large amounts of data to university constituents. Yet, as Dr. Santos writes, those who are charged with creating and utilizing institutional databases are often not fully aware of the part they play in the creation of “knowledge” rather than the mere reporting of “information.” This chapter provides a clear example of how knowledge and information differ, and how academic managers can fail to understand these dissimilarities.

Section III of this volume is titled, “The Knowledge Management of Teaching and Learning,” and contains two chapters. Chapter VII, “Revealing Unseen Organizations in Higher Education: A Study Framework and Application Example,” by Lucie Sommer, describes MIT’s Open Courseware Project and the Open Knowledge Initiative from a structural perspective. In this chapter, Sommer places MIT’s course management system within a social context, reframing the technology within a reflexive and communicative social environment. She concludes that in the process of creating online digital environments, higher education institutions may be (unknowingly) creating a new form of educational organization. The revelation of a paradox is a key contribution of her work to the field of KM as Sommers recognizes that a process of knowledge management can lead to an unknown and misunderstood progression of organizational reorganization.

Finally, Veronica Diaz and Patricia McGee have contributed Chapter VIII, which is titled, “Distributed Learning Objects: An Open Knowledge Management Model.” The authors use their expertise in instructional technology to guide us through the various ways in which learning objects are stored and classified for retrieval. The chapter contains a sophisticated understanding of how the products and processes of learning are influenced by both an open

knowledge system and the market-driven knowledge economy. This chapter is significant in that multiple schemas for classification still exist, and various paradigms for ownership, sharing, and distribution are still possible.

The final section of the book, Section IV, contains six case studies on the topic of information management in higher education. The case studies were chosen for their applicability to a knowledge management framework and for their utility in describing the myriad of social forces at work in educational organizations. This section includes the following case studies: “Policy Processes for Technological Change” by Richard Smith, Brian Lewis, and Christine Massey; “Enterprise System Development in Higher Education” by Bongsug Chae and Marshall Scott Poole; “Higher Education Culture and the Diffusion of Technology in Classroom Instruction” by Kandis Smith; “Wiring Watkins University: Does IT Really Matter?” by Andy Borchers; “Challenges of Complex Information Technology Projects: The MAC Initiative” by Teta Stamati, Panagiotis Kanellis, and Drakoulis Martakos; and “A Case of an IT-Enabled Organizational Change Intervention: The Missing Pieces” by Bing Wang and David Paper. At the end of the case studies is a set of discussion questions and notes for instructors. These teaching materials may be used in conjunction with the case studies or the chapters in this volume and may be useful in a variety of classroom settings.

Additional resources for scholars and practitioners are included at the end of this volume. Appendix A includes resources for further exploration, including online clearinghouses for information on KM and higher education. Appendix B contains a bibliography of KM literature and related topics that the authors and I have compiled. Furthermore, Appendix C contains a glossary of terms related to the field of knowledge management. We hope you find this section useful in your exploration of KM in the higher education sector.