
INFORMATION LITERACY AND KNOWLEDGE ORGANIZATION IN INFORMATION MANAGEMENT PROCESS

APLICABILIDADE DA COMPETÊNCIA INFORMACIONAL E DA ORGANIZAÇÃO DO
CONHECIMENTO NO PROCESSO DE GESTÃO DA INFORMAÇÃO

APLICABILIDAD DE LA COMPETENCIA INFORMACIONAL Y DE LA ORGANIZACIÓN DEL
CONOCIMIENTO EN EL PROCESO DE GESTIÓN DE LA INFORMACIÓN

¹Selma Leticia Capinzaiki Ottonicar, Beatriz Rosa Pinheiro dos Santos, Isabela Santana de Moraes

¹Universidade Estadual Paulista

Correspondência

¹ Selma Leticia Capinzaiki Ottonicar
Universidade Estadual Paulista
Marília, SP.
Email: selma.leticia@hotmail.com
ORCID: <http://orcid.org/0000-0001-6330-3904>

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RESUMO: No atual contexto de produção e acesso da informação, as organizações precisam saber tratar as informações obtidas, seja por meio digital ou analógico. Para tanto, existe um processo conhecido como gestão da informação, responsável pela coleta, processamento, armazenagem e disseminação. Defende-se que as etapas desta gestão podem ser norteadas pela competência informacional e pela organização do conhecimento. Portanto apresentam-se os seguintes questionamentos: qual a importância da competência informacional e da organização do conhecimento na gestão da informação? Como as técnicas de organização do conhecimento e a competência informacional contribuem para a gestão da informação? O objetivo é refletir sobre a importância da competência informacional e da gestão do conhecimento para o desenvolvimento da gestão da informação inteligente, que atenda às necessidades das organizações contemporâneas. Este trabalho se justifica por inter-relacionar os temas organização do conhecimento, gestão da informação e competência informacional e sua contribuição para as organizações, caracterizando-se como tema interdisciplinar. As discussões apresentam a inter-relação entre organização do conhecimento, competência informacional e organização do conhecimento, a fim de melhorar os processos organizacionais. Como considerações finais, defende-se que os três temas propostos contribuem com a aplicação e melhoria da gestão da informação, para que os indivíduos construam conhecimento.

PALAVRAS CHAVE: Gestão da Informação. Competência informacional. Gestão do conhecimento. Organização e representação do conhecimento.

ABSTRACT: In the current context of information production and access, organizations need to be able to handle the information they obtain, whether digital or analog. Therefore, there is a process known as information management, responsible for the collection, processing, storage and dissemination. It is argued that the steps of this management can be guided by informational competence and the organization of knowledge. Therefore, the following questions are raised: what is the importance of information competence and knowledge organization in information management? How do knowledge organization techniques and information competence contribute to information management? The objective is to reflect on the importance of informational competence and knowledge management for the development of intelligent information management, which meets the needs of contemporary organizations. This work is justified by interrelating the topics knowledge organization, information management and informational competence and its contribution to organizations, characterizing itself as an interdisciplinary theme. The discussions present the interrelationship between knowledge organization, informational competence and knowledge organization, in order to improve organizational processes. As final considerations, it is argued that the three proposed themes contribute to the application and improvement of information management, so that individuals construct knowledge.

KEYWORDS: Information management. Literacy information. Knowledge management. Organization and representation of knowledge.

RESUMEN: En el actual contexto de producción y acceso de la información, las organizaciones necesitan saber tratar las informaciones obtenidas, ya sea por medio digital o analógico. Para ello, existe un proceso conocido como gestión de la información, responsable de la recolección, procesamiento, almacenamiento y disseminación. Se defiende que las etapas de esta gestión pueden ser guiadas por la competencia informacional y por la organización del conocimiento. Por lo tanto, se presentan los siguientes cuestionamientos: ¿cuál es la importancia de la competencia informacional y de la organización del conocimiento en la gestión de la información? Como las técnicas de organización del conocimiento y la competencia informacional contribuyen a la gestión de la información? El objetivo es reflexionar sobre la importancia de la competencia informacional y de la gestión del conocimiento para el desarrollo de la gestión de la información inteligente, que atienda a las necesidades de las organizaciones contemporâneas. Este trabajo se justifica por interrelacionar los temas organización del conocimiento, gestión de la información y competencia informacional y su contribución a las organizaciones, caracterizándose como tema interdisciplinario. Las discusiones presentan la interrelación entre organización del conocimiento, competencia informacional y organización del conocimiento, a fin de mejorar los procesos organizacionales. Como consideraciones finales, se defiende que los tres temas propuestos contribuyen con la aplicación y mejora de la gestión de la información, para que los individuos construyan conocimiento.

PALABRAS CLAVE: Gestión de la Información. Competencia informacional. Gestión del conocimiento. Organización y representación del conocimiento.

1 INTRODUCTION

Contemporary organizations need information and knowledge for decision-making and problem solving. Information and communication technology has stimulated information production in both external and internal contexts of the organization. Workers produce a lot of information during their activities, so managers realized that the information should be managed to make the access, organization and treatment easier.

In order to establish an information management program, it is relevant to consider the impact of information literacy as a skill possessed by managers and workers. Managing information does not make sense if individuals have difficulty to access, evaluate and filter information. Furthermore, information literacy introduces standards that guide its use by individuals, and we emphasize that these elements can influence information management.

The internet is the most commonly used information source because of its speed and low cost. Thanks to that, there are different ways to organize information, and in this context knowledge organization can be useful. Knowledge and information classification is widely used by library science and archiving; however, management may appropriate its concepts and practices to guide information treatment in the organizational context.

Based on these ideas about information management, information literacy, and knowledge organization, this article has the following research problems: What is the importance of information literacy and knowledge organization to information management? How do knowledge organization and information literacy techniques contribute to information management? This paper is fundamental to the field of Information Science because it connects knowledge organization, information management and information literacy through a conceptual chart (Chart 1). Furthermore, it contributes to the development of an efficient information management in organizations, since people need to plan information access and storage.

The purpose of this article is to discuss the importance of information literacy and knowledge organization to efficiently develop information management. Efficient information management answers the needs of organizations. Also, the article aims to demonstrate a connection between knowledge organization, information literacy, and information management to improve organizational processes.

2 KNOWLEDGE ORGANIZATION AND REPRESENTATION

The spread of information occurred internationally in parallel with the Industrial Revolution in the 18th and 19th centuries. After that, information studies became more necessary. According to Pinheiro (2002) the first signs of Information Science as a scientific field appeared circa 1940.

Information science is a field of study focused on information organization, representation and retrieval. It aims to understand how to represent knowledge, what kinds of knowledge can be represented, if everything can be represented, and if a field of knowledge can be also represented. However, knowledge and information are difficult to conceptualize because of their semantic extent and different analysis perspectives (SCHIESSL; SHINTAKU, 2012).

Individuals interpret their culture, values, and principles to transform information into knowledge. A person's context, personality and worldview influences his interpretation. Knowledge is subjective and social because humans are part of a context and they interact with the world around them. Knowledge is related to cognitive aspects present in the human mind. The mental processes of concept gathering, assimilation, association, construction, and destruction are also cognitive. Knowledge is important socially, since it involves knowledge gathered over time and socialization (SCHIESSL; SHINTAKU, 2012).

In Information Science, knowledge has meanings in both individual and social processes, because it is developed, documented and socialized in a field, a science or an aspect of human life (CAPURRO, 2003). The knowledge organization needs to understand the field of the document to better represent it.

The organization and representation of knowledge have been useful since the first libraries emerged. Over time, their techniques and procedures were improved to answer the needs of the time.

The representation is connected to the concept of substitution, in which there is a relationship between sign and meaning to replace symbols. Writing, for example, is a representation recorded in a support such as wood, rock, paper, computer, etc. These records stimulate knowledge production and dissemination, and they do not depend on time or space to be shared. Therefore, a knowledge recorded in a book can be consulted a thousand years from now at a different place (SCHIESSL; SHINTAKU, 2012).

Knowledge representation is related to ways of symbolizing knowledge. The individual make an effort to shape information elements which compose recorded knowledge. It aims to represent knowledge and disseminate it so it can be socialized.

The representation process is understood as the replacement of a complex linguistic entity by a short description. This process involves the analysis of the content of a document and the transformation of the analysis into a linguistic expression based on the document. For example, librarians identify the author, title, and keywords to catalog a document.

Brascher and Carlan (2010, p. 150): “the knowledge organization is a process that aims to construct knowledge representation”. Therefore, it is an analysis, synthesis, classification, organization, and access process of the object. Representation and organization are related to the object and symbols which replace this object and its knowledge.

Information representation and organization are interdependent, and they use documentary languages, abstracts, and summaries to represent, organize and retrieve documents and their information (LARA; TÁLAMO, 2007).

Information science interdisciplinarity is part of knowledge organization, which is also connected to computer science, linguistics, psychology, business, philosophy, sociology, etc. Every field uses different aspects of knowledge organization. These aspects can include human cognition studies as well as representation models softwares in computer systems (PINHEIRO, 2002).

In information science, the organization and representation processes are only useful to socialized knowledge. That kind of knowledge is managed, recorded and shared to develop new knowledge. Knowledge organization is the construction of conceptual systems, so it structures and organizes concepts and organizes these knowledge by topics.

Knowledge organization is a field that codifies the knowledge, focusing on its retrieval. It communicates and exchanges knowledge, and it aims to support teaching and learning processes, to encourage and subsidise scientific investigation. That last purpose is considered to be the most important one of the field. Knowledge organization exists to reach a goal, so it needs to develop representation to organize in the future (HJORLAND, 2008).

Hjorland (2003) demonstrates the evolution of organization from five types of technology:

- 1) Classification which started around 1876 with Charles Cutter and Dewey, later by Henry Bliss and Ranganathan;
- 2) Documentation in 1892 with Paul Otlet
- 3) Storage and Retrieval, when information science was greatly influenced by computers, in 1950;
- 4) Bibliometry, which retrieves articles from their citations, by Eugene Garfiel in 1963;

5) Retrieval of complete article and hypertext with the internet which marks the current moment and development of the knowledge organization.

The first item is a knowledge organization system, so its concepts developed based on systems principles. These principles are still valid with modern-day web semantics.

Souza, Tudhope and Almeida (2012) also emphasized that knowledge organization systems are not new in the librarian field. They were used for centuries in catalogs such as bibliographic classification systems and documentary languages. However, current researches are focused on web semantics to remove ambiguity and vocabulary so that machines can understand words. Therefore, knowledge organization systems vary in format and presentation, and they share a general characteristic which is to represent knowledge to promote its retrieval.

Hjorland (2003) divides knowledge organization into two types: a) the intellectual knowledge organization, also called cognitive organization. The information professional uses concepts, systems and theories to be organized. b) social knowledge organization which is basically the organization in courses, professions, business, and social groups.

The growth of information on the web created the need for the improvement of tools such as thesauruses, classifications and ontologies. Professionals understand that the implementation of knowledge organizations systems are urgent. These systems are conceptual networks and are sometimes viewed in a philosophical or epistemological approach (BARITÉ, 2011; GARCÍA JIMÉNEZ, 2004).

The current context of technological progress and improved access to information stimulates recorded information production. Because of that, individuals need an efficient organization and identification to make retrieval easier. People need to be encouraged to access more information and develop new knowledge.

The main goal of information organization is to retrieve informational objects. Informational objects are information recorded in different formats such as texts, images, registers, sounds, cartographic representations and web pages (SCHIESSL; SHINTAKU, 2012, p. 35).

Knowledge organization is how the topics are arranged and how they are systematized. In information science, knowledge organization focuses on organization activities, representation, and retrieval of recorded knowledge (SCHIESSL; SHINTAKU, 2012).

3 INFORMATION LITERACY

The term information literacy was coined in 1974 in the United States by Paul Zurkowski in the National Forum of Information Literacy. Zurkowski defended the need for a theoretical movement of information literacy based on organizational and social needs (DUDZIAK, 2003).

In 1974, several researchers and information professionals started to research information literacy in the information science field. Every country has translated the term to adapt it to their context. In Brazil, there were several translations because they appropriated it from both English and Spanish. Therefore, different terminology is used such as *competência informacional*, *competência em informação*, *letramento informacional*, *alfabetização informacional*, etc.

The various use of the terms in Brazil has caused intense discussions by researchers in the field. However, Ottonicar (2016) explains that the concepts and contributions of the phenomenon are more important than its terminological discussion.

Information literacy is a functional literacy in modern society, since it allows an individual to exercise citizenship and be integrated socially (BELLUZZO; FERES, 2015). Information literacy helps citizens to access information source in several formats such as analog and digital. The information literate person knows how to evaluate information and its sources through the identification of misinformation, intentions, and ideology on the text. The person uses information in his personal, professional, and social life to make a decision and understand the world critically.

That literacy is formed by two different dimensions that complement each other. The first dimension involves a set of abilities and capacities that allow practical investigation of knowledge in society. The second is related to critical thought about the individual's context (BELLUZZO, 2007). Complementing Belluzzo (2007), the Association of College and Research Libraries (ACRL) explains that:

ACRL's previous definition of information literacy describes it as a set of skills or competencies that are uniform among all learners. This conception is based on an inventory of competencies assumed to operate one-dimensionally across all disciplines and contexts. Other conceptions growing out of the research of Bruce, Lupton, Lloyd, and Limburg identify the limitations of this skill- and- individual-attribute-based conception. The commonalities of these researchers' findings emphasize the highly relational, context-specific nature of information literacy, and the varied circumstances in which individuals and groups activate these competencies and describe them to researchers. Clearly, the experience of studying, working, and living in a complex information environment produces a variety of potential models for information literacy learning across a variety of disciplines, domains, contexts, and work environments (ACRL, 2014, p.6).

That new concept proposed by ACRL (2014) demonstrates that the understanding of information literacy evolved, since it considers behaviors, cognition and experiences of individuals as important elements to develop it. This new idea started with Bruce's phenomenography research in 2000, and now there is a strong movement in Europe and Oceania which focuses on that approach.

Professionals need to know user's needs in the information society context to contribute to knowledge construction. In order to make resources available in libraries, professionals must organize objects, videos, and magazines so users can retrieve them. To organize knowledge efficiently, individuals need to access, evaluate and use information in an intelligent way. These actions are part of the concept of information literacy.

People need to access, evaluate, and use sources of information to achieve a goal, solve a problem, and make a decision in the information management process. Furthermore, knowledge organization is also important to that process, and it is considered as a basic element of information management.

4 INFORMATION MANAGEMENT

The information management (IM) term can be found in Paul Otlet's work, especially in his book called *Traité de documentation*. That book was a reference to develop IM; at that time it was called documentation. In the current context, most of the knowledge about information management and informational resource management was originally created by Robert S. Taylor in 1960. Also, besides Paul Otlet, two other authors contributed to information management theme: Frederick Hayek e Vanevar Bush (BARBOSA, 2008).

The application of current IM is interdisciplinary, as explained by Barbosa (2008). It is based on three important fields: business, computer science and information science. IM helps organizations to deal with competitiveness, new knowledge production, and information input to decision-making (CARVALHO, 2012). However, Silva and Tomaél (2007) explain that IM manages information input and external information based on information flux and systems. Furthermore, these authors infer that IM is related to gathering, processing and managing knowledge, and it involves knowledge management content.

According to Oliveira (2010), IM is divided into three hierarchy levels to achieve the organizational goals: operational, tactical, and strategic. The lowest level requires problem solving; on the other hand, the highest level focuses on IM in a broad way. Reginato et al. (2012) considers that managing information in an intelligent way and using it as an strategic resource may contribute effectively to the planning of a company.

According to McGee and Prusak (1994) IM is formed by

1. identification of the information needs
2. information gathering
3. treatment of information
4. classification of information
5. storage of information

6. product or service development,
7. dissemination to analysis
8. use of information

Choo (1998) explains that IM can be seen as a cycle and information process activities. Furthermore, he emphasized that IM integrates with information technology management and information resource management.

According to Ponjuán Dante (2007), IM is a process which uses the basic resources of organizations (financial, physical, human, and material). It aims to manage internal and external information.

Based on those ideas, current organizations need knowledge organization and information management to contribute to professionals in their work activities. However, they need to be information literate to deal with information every day. Ponjuán Dante (2007) complements that idea, explaining that IM makes individuals understand different aspects.

The efficient IM:

requires not only to know sources, services and systems, life cycle and its quality criteria, but also to define policy related to the role of information management. Therefore, people can create and store information in a dynamic context of information flux. (PONJUÁN DANTE, p.30, 2007).

We emphasize that the IM context is interdisciplinary, since it involves other disciplines which contribute to the IM process. IM is related to knowledge organization, whose role is to organize, to represent and to retrieve information and knowledge. Furthermore, information literacy aims to make an individual capable of accessing information, evaluating sources, and using information effectively. That connection will benefit IM and the performance of the organization.

5 DISCUSSION

There are different theoretical models to exemplify and demonstrate information management steps. Choo's model (2003) was chosen, which introduces six process steps: identification of information needs, information acquisition, information organization and storage, information products and services development, information dissemination, and information use.

Every step must be achieved in an efficient way, so the organization needs an information literate professional. The international standards and indicators of literacy guide the individual's abilities and capacities. In Brazil, Belluzzo (2007) translated and adapted these standards based on the context of the country. Belluzzo's standards were adopted to develop Chart 1.

The knowledge organization steps may be achieved by several systems. Because of that, we proposed steps in a generic way based on the most commonly used theoretical systems.

Knowledge needs to be organized so people can access, retrieve, and locate it easily to create new knowledge. The analysis of social knowledge and the understanding of mediation tools are also important. These tools are also known as knowledge organization systems, for example, thesaurus, taxonomy, classification systems, and ontology. Therefore, knowledge organization is responsible for developing tools to retrieve recorded knowledge. The object of this study is the document (HJORLAND, 2003; 2008).

Barité (2001) relates ten basic premises to justify knowledge organization intellectually:

- 1) Knowledge is a social product, a social need, and a social transformation;
- 2) Knowledge is produced by information, and after it is socialized can become information again;
- 3) Knowledge structure and communication become an open system;
- 4) Knowledge must be organized so a person and society can use it;
- 5) There are many ways to organize knowledge;
- 6) Every knowledge organization is artificial;
- 7) Knowledge is always recorded in documents. It is a set of organized data, and it can be used in several ways;
- 8) Knowledge is expressed through concepts, and it is organized based on conceptual systems;
- 9) Conceptual systems are organized with scientific, functional, or documentation purpose;
- 10) The laws that guide conceptual systems organization are uniform and predictable, and they can be used equally by every field.

Based on Barité (2001) and Hjørland (2003; 2008) we introduce the general steps of knowledge organization. These steps are connected to Belluzzo’s information literacy standards (2007) and Choo’s information management steps (2003).

Chart 1. The connection between information management, information literacy and knowledge organization.

Information Management Steps	Information Literacy Standards and Indicators	Knowledge Organization Steps
Identification of information needs	Standard 1- Information literate people identify the nature and the extent of the information need.	Material recognition
Information acquisition	Standard 2 - Information literate people access needed information effectively.	Document classification
Information organization and storage	Standard 3 - Information literate people evaluate information and its sources critically.	Content treatment
Information products and services development	Standard 4 - Information literate people use information effectively to reach a goal or a result individually or in a group.	Knowledge representation

Information dissemination	Standard 4 - Information literate people use information effectively to reach a goal or a result individually or in a group	Document storage
Information use	Standard 5 - Information literate people understand economic, legal and social issues of information use. Also, they access and use information ethically and legally.	Knowledge presentation

Source: created by the authors based on Choo (2003), Belluzzo (2007), Barité and Hjørland (2003;2008)

The third column of the Chart 1 shows the knowledge organization steps. The first step is material recognition: it is first contact with the material that can be physical or digital. The second step is document classification, which identifies the type of the document such as book, newspaper, painting, or any other information content.

Content treatment is the third step, and it is the nature of the content and field of the document. Afterwards, the information professional represents information through documentary language and the field of the content. That step is known as knowledge representation, which is developed by content analysis so users can use information. The next step is the document storage, and it is stored in shelves or in a digital environment. The information is available to users in an efficient way in the last step, known as knowledge presentation.

The organized information must be available in a useful format to users, since people need to access and use it in an easy way. Because of that, information professionals must observe the information format and the terms used in the knowledge representation. Furthermore, the documentary language should be close to the community’s language, so the document will allow access by everyone.

The first step of information management “identification of information needs” shows that the professional should perceive his needs to solve a problem or make a decision (CHOO, 2003). The professional has to determine the nature and extent of his information needs (BELLUZZO, 2007) based on his knowledge and experiences. He is capable of understanding professionals’, clients’, and users’ needs. That step requires the analysis of activities which are related to organizational goals.

The information acquisition process (CHOO, 2003) involves information communication and technology (ICT) and analog information seeking, such as printed information sources. The professional needs to make a survey about information sources, topics, and formats. He cannot forget that there are informal information sources such as other people. Therefore, the information literate person accesses information effectively and selects the most appropriate searching methods or information systems retrieval. He efficiently develops information-seeking strategies, seeks information with people or digitally, improves seeking strategies constantly, and gathers, registers, and manages information and its sources (BELLUZZO, 2007).

Afterwards, there is the information organization and storage phase (CHOO, 2003) which involves knowledge about information supports. The professional must evaluate information and its sources critically to apply evaluation criteria. Furthermore, he has to compare the new knowledge with the previous knowledge to determine the value added, contradictions, or other characteristics of information (Belluzzo, 2007).

The development of information products and services occurs through information storage (CHOO, 2003). This storage means to register it formally as charts, graphics, or maps. The individual uses information to achieve a result, and he is capable of synthesizing information to develop or complete a project. He works with information and uses several systems and structures (BELLUZZO, 2007).

As a result, the professional disseminates information so other people can retrieve it and learn from it (CHOO, 2003). The information literate professional uses information, communicates the results of a project, knows documentation norms, and cites informational content (BELLUZZO, 2007).

The information use process occurs through organizational decision-making (CHOO, 2003) or problem solving. The use appears in several levels, and it is related to a decision capable of changing the organizational future. In addition, decision-making is also part of small choices. The professional constructs knowledge, because he understands the economic, legal, and social issues of information. He accesses and uses information ethically and legally.

Therefore, there is a learning construction, since the person understands ethical and socioeconomic issues of information, communication, and technology. Furthermore, information literate individuals respect the law, rules, organizational policy, and norms related to information sources' access and use. They cite information sources in their communications or result regardless of the format (BELLUZZO, 2007).

6 CONCLUSIONS

This paper aimed to verify the importance of information literacy and knowledge organization to information management. The discussion showed that the material recognition requires information literate people. The professional must determine the nature and the extent of information needed. Therefore, these two actions are important so the person can access and evaluate information sources critically.

In order to get information, individuals need to classify the document. The connection between information literacy, knowledge organization, and information management showed that the professional who evaluates information and its sources critically is capable of processing information effectively. As a result, organization and storage are better coordinated.

The knowledge representation provides the information use to achieve a purpose. The information use occurs through the analysis of the material content. Therefore, that process results in the development of information products and services. The knowledge availability is the result of information dissemination to people.

Furthermore, individuals need to understand the economic, ethical, legal, and social issues of information use to develop knowledge representation. The information literate professional organizes knowledge and stimulates the evaluation of the information process. Therefore, information and knowledge can be accessed, evaluated, and used intelligently and efficiently.

REFERENCES

ACRL. **First part of the draft framework for information literacy for higher education.** Disponível em: < <http://acrl.ala.org/ilstandards/wp-content/uploads/2014/02/Framework-for-IL-for-HE-Draft-1-Part-1.pdf>>. Acesso em: 09 jan. 2017.

BARBOSA, Ricardo Rodrigues. Gestão da informação e do conhecimento: origens, polêmicas e perspectivas. **Informação & Informação**, Londrina, v. 13, n° especial, 2008. Disponível em: < <http://www.uel.br/revistas/uel/index.php/informacao/article/view/1843> >. Acesso em: 19 abr. 2017.

BARITÉ, Mario. Organización del conocimiento: un nuevo marco teórico-conceptual en Bibliotecología y Documentación. In: CARRARA, Kester. (Org.). **Educação, universidade e pesquisa**. Marília: Unesp-Marília-Publicações, 2001. p.35-60.

_____. Sistemas de organización del conocimiento: uma tipologia atualizada. **Informação & Informação**, Londrina, v. 16, n° especial, p. 122-139, jan./jun. 2011.

BELLUZZO, Regina Celia Baptista. **Construção de mapas: desenvolvendo competências em informação e comunicação**. Bauru: Cá Entre Nós, 2007.

_____.; FERES, Glória Georges. Competência em informação, redes de conhecimento e as metas educativas para 2021: reflexões e inter-relações. In: BELLUZZO, Regina Celia Baptista.; FERES, Glória Georges. **Redes de conhecimento e competência em informação: interfaces da gestão, mediação e uso da informação/organização**. Rio de Janeiro: Interciência, 2015, p.1-35.

BRASCHER, Marisa.; CARLAN, Eliana. Sistemas de organização do conhecimento: antigas e novas linguagens. In: ROBREDO, Jaime.; BRASCHER, Marisa. (Org.). **Passeios pelos bosques da informação: estudos sobre representação e organização da informação e do conhecimento**. Brasília: IBICT, 2010. p. 147-176.

BRUCE, Christine. Information literacy programs and research: reflections on 'Information literacy programs and research: An International review'. **The Australian Library Journal**, v.49, n.3, p.209-218, 2000. Disponível em: < <http://dx.doi.org/10.1080/00049670.2011.10722653> >. Acesso em: 05 abr. 2017.

CAPURRO, Rafael. Epistemologia e ciência da informação. Tradução: Ana Maria Rezende Cabral, Eduardo Wense Dias, Isis Paim, Ligia Maria Moreira Dumont, Marta Pinheiro Aun e Mônica Erichsen Borges. In: ENCONTRO NACIONAL DE PESQUISA EM CIÊNCIA DA INFORMAÇÃO, 5., 2003, Belo Horizonte. **Anais...** Belo Horizonte: Escola de Ciência da Informação, UFMG, 2003.

CARVALHO, Livia Ferreira de. Gestão da Informação em Micro e Pequenas Empresas: um estudo do arranjo produtivo local de confecção do vestuário de Jaraguá-GO. **Perspectivas em Gestão & Conhecimento**, João Pessoa, v.2, n. esp, p. 57-72, out. 2012. Disponível em: < <http://periodicos.ufpb.br/index.php/pgc/article/view/12598/8018> >. Acesso em: 02 abr. 2017.

CHOO, Chun Wei. **Information management for the intelligent organization: the art of scanning the environment**. 2.ed. [s.l.: ASIS], 1998.

_____. **A organização do conhecimento: como as organizações usam a informação para criar significado, construir conhecimento e tomar decisões**. São Paulo: Senac, 2003.

DUDZIAK, Elisabeth Adriana. Information literacy: princípios, filosofias e práticas. **Ciência da Informação**, Brasília, v.32, n.1, p. 23-35, jan./abr. 2003. Disponível em: < <http://revista.ibict.br/ciinf/index.php/ciinf/article/view/123/104> >. Acesso em: 12 fev. 2017.

GARCÍA JIMÉNEZ, Antonio. Instrumentos de representación del conocimiento: tesauros versus ontologías. **Anales de Documentación**, n.7, p. 79-95, 2004. Disponível em: < <http://revistas.um.es/analesdoc/article/view/1691/1741> >. Acesso em: 12 abr. 2017.

HJORLAND, B. Fundamentals of knowledge organization. **Knowledge Organization**, v. 30, n. 2, p. 87-111, 2003.

_____, B. What is knowledge organization (KO)? **Knowledge Organization**, v. 35, n. 2/3, p.86-101, 2008.

LARA, Marilda Lopes Ginez de.; TÁLAMO, Maria Fátima Gonçalves. Uma experiência na interface Linguística Documentária e Terminologia. **DataGramZero**, v.8, n.5, out. 2007. Disponível em: < <http://basessibi.c3sl.ufpr.br/brapci/index.php/article/view/0000007759/d50ccdddef59b7aa3edf acdffce8228ee> >. Acesso em: 02 fev. 2017.

McGEE, James.; PRUSAK, Laurence. **Gerenciamento estratégico da informação: aumente a competitividade e a eficiência de sua empresa utilizando a informação como uma ferramenta estratégica**. Rio de Janeiro: Campus, 1994.

OLIVEIRA, Joelma de Souza Passos de. **A gestão da informação como suporte ao processo de tomada de decisão em uma instituição pública de ensino superior: um estudo de caso**. 163f. 2010. Dissertação (Mestrado em Ciência, Gestão e Tecnologia da Informação) – Setor de Ciências Sociais Aplicadas, Universidade Federal do Paraná, Curitiba, 2010.

OTTONICAR, Selma Letícia Capinzaiki. **Análise teórico-descritiva da competência em informação de gestores como fator de competitividade das indústrias de eletroeletrônicos da cidade de Garça/SP**. 272f. 2016. Dissertação (Mestrado em Ciência da Informação) – Programa de Pós-Graduação em Ciência da Informação, Universidade Estadual Paulista – Faculdade de Filosofia e Ciências, Marília, 2016.

PINHEIRO, Lena Vania Ribeiro. **Ciência da Informação: desdobramentos disciplinares, interdisciplinaridade e transdisciplinaridade**. Rio de Janeiro: IBICT/MCT, 2002.

PONJUÁN DANTE, Gloria. **Gestión de información: dimensiones e implementación para el éxito organizacional**. Gijón: Trea, 2007.

REGINATO, Carlos Eduardo Roehé.; GRACIOLI, Odacir Deonísio. Gerenciamento estratégico da informação por meio da utilização da inteligência competitiva e da gestão do conhecimento – um estudo à indústria moveleira do RS. **Gest. Prod**, São Carlos, v.19 n.4, p. 705-716, 2012. Disponível em: < <http://www.scielo.br/pdf/gp/v19n4/a04v19n4.pdf> >. Acesso em: 02 abr. 2017.

SCHIESSL, Marcelo.; SHINTAKU, Milton. Sistemas de Organização do conhecimento. In: ALVARES, Lilian (Org.). **Organização da informação e do conhecimento: conceitos, subsídios interdisciplinares e aplicações**. São Paulo: B4 editores, 2012, p. 49-118.

SILVA, Teresinha Elisabeth da.; TOMAÉL, Maria Inês. A gestão da informação nas organizações. **Informação & Informação**, v.12, n.2, jul./dez. 2007. Disponível em: < www.uel.br/revistas/uel/index.php/informacao/article/download/1806/1540 >. Acesso em: 19 abr. 2017.

SOUZA, Renato Rocha.; TUDHOPE, Douglas.; ALMEIDA, Maurício Barcellos. Towards a taxonomy of KOS: dimensions for classifying knowledge organization systems. **Knowledge Organization**, v. 39, n. 3, p. 179-192, 2012. Disponível em: < http://mba.eci.ufmg.br/downloads/Souza_Tudhope_Almeida_KOS_Taxonomy.Submitted.pdf >. Acesso em: 17 fev. 2017.



