Knowledge Management:
What is it? Why do you need to know? How do you support it?

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Abstract: This session will explore a coherent and well-defined framework for understanding knowledge management tools in education from national, cross-institutional, institutional, and technological perspectives. Building on the framework, we will offer practical solutions for putting knowledge management tools into practice to support students, faculty, institutions, and initiatives.

Definitions of knowledge, e-knowledge, and knowledge management:

1. …business process for managing intellectual assets. It is a discipline that promotes an integrated approach to the creating, capture, organization, access, and use of a company’s knowledge and information assets. Examples are structure databases, textual data, and the tacit knowledge and expertise of individual employees. (Gartner as quoted by Educause)

2. … the systematic process of finding, selecting, organizing, distilling and presenting information in a way that improves an employee’s comprehension in a specific area of interest. (Educause)

3. …the set of organizational processes that create and transfer knowledge supporting the attainment of academic and organizational goals. (Townley, 2003)

4. …relates knowledge to institutional missions and to individual goals of scholars in ways that lead to increased organizational accountability and effectiveness. (Townley, 2003)

5. …[the ability to] capture the knowledge embedded in their organizations…(Brown & Duguid, 2000)

6. Only when information is combined with experience and judgement does it become knowledge. (Kidwell, et al, 2000)

7. E-knowledge consists of knowledge objects and knowledge flows that combine content, context, and insights on application…E-knowing is the act of achieving understanding by interacting with individuals, communities of practice, and knowledge in a networked world. (Norris, et al, 2003)

8. Knowledge can be modeled as a “thing” and a “flow” at the same time. (Norris, et al, 2003)

9. Knowledge management is a broad term that frames a firm’s desire to do a better job in the creation, transfer, and codification of what employees, partners, and customers know. (Orlov, 2006)

10. A KM approach is the conscious integration of the people, processes, and technology involved in designing, capturing, and implementing the intellectual infrastructure of an organization…It is what enables people within an organization to develop the ability to collect information and share what they know, leading to action that improves services and outcomes. (Petrides, 2004)
Assumptions:

1. Theory: knowledge is created in an information-rich world through processes: examining, selecting, organizing, assimilating, and synthesizing information.
2. Tools: technology such as multimedia, information/data-visualization tools, databases, search engines, on-line communication tools, etc., facilitates knowledge creation and sharing.
3. Teaching and Learning: Higher education IS an environment where various kinds of knowledge (learning, teaching, administrative, and research) is created and shared.
4. Communication: KM is about contextualizing information and knowledge through the use of rapidly evolving on-line/electronic communication tools.

Framework:

1. Selectivity: Not all knowledge is created equal. Determine that which is important prior to moving forward. This includes the idea of compressing complex knowledge into a simpler presentation. Brown talks about not crushing knowledge under its own weight. This is not to say that it should be diluted; rather it should be distilled to its essence and presented in clear and obvious ways. Without forethought, the workgroup and/or institution will drown in information and knowledge and not be able to do anything about it.

2. Repurposability: There are several concepts included in this term. Terms such as granularity, re-usability, and enter-once-use-many fall under this heading. In order for knowledge to be useful, it must be small enough to (re)combine with other pieces of knowledge, yet large enough to be meaningful. If individuals have to constantly re-enter knowledge or information that is already known to another system, sharing will diminish. No one has time to rehash the same stuff; individuals must be able to reuse the knowledge they have already documented.

3. Interoperability: Is a corollary to repurposability. It is not enough to be able to reuse collections of knowledge within a system; systems must be aware of the knowledge that other systems house and must be able to access it. This requires standards and integration technologies. Trusted sourcing and cross-system authentication is vital. Knowledge does not exist in just one domain; it must be permitted to “live” outside of a particular context, such as a class.

4. Individual control and ownership: Knowledge creation is an invisible activity that occurs in the human brain (Davenport, 1998). Only when this becomes explicit with supporting artifacts can it be shared. The knowledge that a person possesses or created is her own. It becomes more valuable, and the rate of acquisition accelerates when a person is participating in communities or groups. Thus, KM technologies, by definition, facilitate this sharing of knowledge in social networking. It is imperative, however, that the focus and highest level of consideration be given to the individuals rights to control and responsibilities to share.

5. Openness: KM technologies and processes must escape proprietary boundaries. This is not an advertisement for open source. This is to suggest that only when knowledge is shared and made explicit to all is it truly valuable. When it is exposed, others can comment and build upon it, make connections in new ways, and return the ideas and knowledge to the originator in enriched forms. While open source software is an example of this in practice, the connectedness the internet permits can enable all knowledge processes to behave this way.
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References:


Townley, C. T. (2003). Will the academy learn to manage knowledge? *EDUCAUSE Quarterly, Number 2*