

The Course of Knowledge - Book Review



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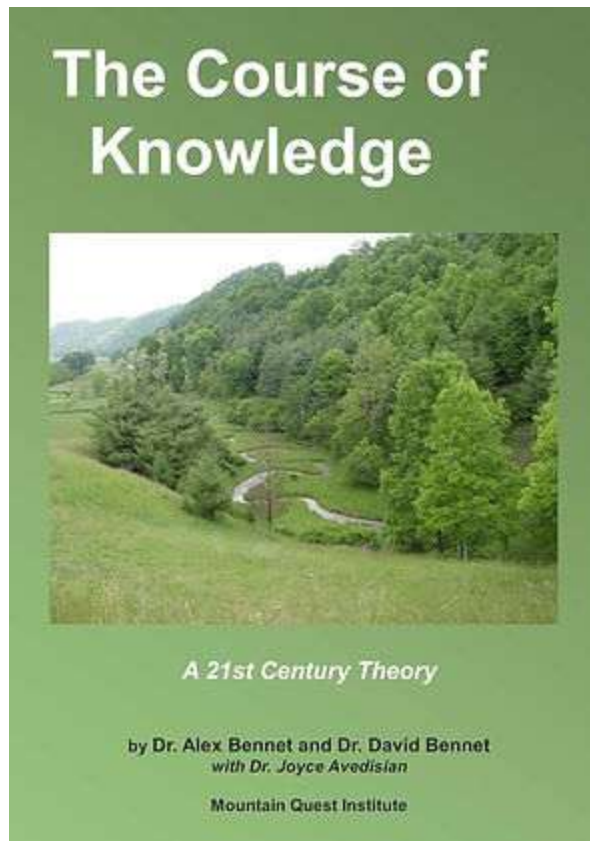
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The Course of Knowledge: A 21st Century Theory by Bennet & Bennet and Joyce Avedsian defines knowledge as information that enables effective action, evolving across surface, shallow, and deep levels. It offers a practical framework for leveraging tacit and contextual knowledge, helping individuals and organizations improve decision-making, learning, and adaptability in complex environments.



The book titled "**The Course of Knowledge: A 21st Century Theory**" written in 2018, unexpectedly crossed my path while planning a tacit knowledge management course. The authors, Bennet & Bennet, were already familiar to me from my previous readings on knowledge management, and this time another co-writer, Joyce Avedsian, joined them.

With 25 years of intensive work in knowledge management, I believe I have a comprehensive understanding of the essence of knowledge, its characteristics, and its application, particularly in organizational knowledge management. However, this book proved to be a captivating and informative read, albeit only sometimes easy to digest. Nonetheless, it was certainly worth the effort.

The book covers several main topics, including:

1. **Terms related to knowledge:** One chapter is dedicated to exploring various terms associated with knowledge, providing a comprehensive compilation.
2. **The nature of knowledge:** The book delves into the fundamental characteristics of knowledge, discussing its form and components and highlighting the distinction between knowing about something and how to apply it.
3. **The Human Brain and Knowledge:** This topic explores the intricate relationship between the human brain and knowledge, examining how knowledge is stored, processed, and accessed within the neural networks of the brain.
4. **Application of knowledge:** This section explores different aspects of applying knowledge, including utilizing knowledge gaps, leveraging tacit knowledge, the process of knowledge development, and the concept of wisdom as the pinnacle of knowledge attainment.
5. **Looking beyond:** The book expands its focus to encompass additional dimensions related to knowledge, such as the influence of personality on knowledge acquisition and utilization, as well as the role of values in shaping and guiding knowledge-related actions.

While this summary provides key points from each topic, it needs to capture the full breadth and depth presented in the original book.

I hope that, like me, you find value in this summary and consider reading the entire book to gain a more comprehensive understanding.

Terms related to knowledge

The book introduces and defines several key knowledge-related terms, emphasizing the importance of understanding the depth associated with these definitions. Here are the main terms discussed in the book:

1. **Information** refers to content organized or presented as patterns. When information is gathered and combined, it can contribute to knowledge.
2. **Knowledge** is information that enables effective action to be taken. It represents the capacity, whether potential or actual, to engage in effective activities. Traditionally, knowledge has been conceptualized as part of a pyramid that includes data, information, knowledge (intelligence), and wisdom. The true test of the content's relevance to knowledge lies in its ability to contribute to effective decision-making and action.
3. **Know-What Knowledge** pertains to knowledge's essence and content. It encompasses justified truths, incoming information, and memory.
4. **Know-How Knowledge** supports the process of performing actions. It includes the creation of new knowledge and the ability to act based on existing knowledge.
5. **Data** is a subset of information organized to allow for analysis or processing, often within a computer system. This differs from the conventional definition of data as less significant than information.
6. **Shared Understanding** refers to the transmission of knowledge from one person to another, where the recipient can interpret the knowledge within the same context and regenerate the same understanding as the transmitter.
7. **Surface knowledge** answers questions about what, when, where, and whom. It represents a configuration of information that can be stored in books, computers, or our brains. It is explicit knowledge that is often difficult and easy to remember.
8. **Shallow Knowledge** is the knowledge that lies beneath the surface. It encompasses not only information but also understanding, meaning, and sense-making. Shallow knowledge can be attributed to individuals or organizations, projecting the action potential based on contextual

understanding. It becomes cohesive and integrative when related to a collection of interconnected knowledge domains.

9. **Deep knowledge** encompasses understanding, meaning, and integration into patterns, allowing individuals with deep knowledge to adapt to changing contexts and situations. Deep knowledge arises from creative and intuitive processes, experience-based forecasting, and theoretical insights. Its development primarily occurs at the subconscious level.
10. **Explicit Knowledge** refers to expressive knowledge that can be retrieved from memory and accurately described using words or other representations, enabling others to understand it. It can be shared through various means, such as social media, and captured and expressed, leading to comprehension and questioning.
11. **Implicit Knowledge** is knowledge that is not immediately conscious or known to the individual but can be discovered. Due to its complexity, there has yet to be a consensus on an exact definition of implicit knowledge. It involves variable communication capacity and requires exploration to uncover.
12. **Tacit Knowledge** is the knowledge that is not easily expressed in words, representing thoughts about decision-making or actions that individuals struggle to articulate. According to Polanyi, tacit knowledge resides in the subconscious. It is challenging to explain, as it may elude our conscious understanding. Tacit knowledge is formed through a combination of internal and external information. In some cases, individuals may be unaware of the very existence of their tacit knowledge.
13. **Intelligence represents** a state where intention, meaning, and values align perfectly, and the expected outcomes are understood and communicated among all parties involved.
14. **Wisdom** is the highest level among different levels of knowledge. Wisdom encompasses patterns that represent fragments of knowledge or other patterns. The book presents various definitions of wisdom scholars propose, highlighting the authors' analysis of this concept.

15. **Values** are outlines or directions that determine what is important and less important, guiding behavior and decision-making.

By understanding these terms and their nuances, readers can develop a deeper appreciation of knowledge and its various forms.

The nature of knowledge

Characteristics of Knowledge:

Knowledge exhibits several key characteristics that shape its nature and impact. Consider the following points:

- Knowledge exists in our minds as conserved or expressive patterns that can be consciously activated and reflected upon.
- Knowledge comprises two components: knowing about something and knowing how to apply that knowledge. The first component pertains to the content and substance of knowledge, while the second component relates to our ability to take appropriate action based on that knowledge.
- Knowledge is always context-dependent. The inclusion of contextual clues enhances our understanding and comprehension.
- Our experiences and areas of specialization contribute to developing an internal world that represents our learning history and accumulated knowledge.
- Context can be understood across eight levels, ranging from individual words and situational factors to attention, nonverbal communication, the systems we interact with, our worldview, values, and experiences. It extends to the influence of subconscious processes and even higher-level patterns of meaning within our minds, some of which are conscious while others are not. Recognizing these levels deepens our consciousness.
- Knowledge is never fully comprehensive; it remains partial. It resides within our minds and continually expands whenever we retrieve it as we fill in the gaps differently.

- Knowledge evolves through usage and expands when shared with others.

Levels of Knowledge:

Knowledge can be classified into three levels: surface, shallow, and deep. Each level possesses distinct properties:

Surface Knowledge:

- **Attempt:** Immediate awareness and patterns of understanding.
- **Learning:** Conscious memorization.
- **Knowledge:** Knowledge about a particular subject.
- **Action:** Remembering and applying knowledge.
- **Problems:** Relatively simple.

Shallow Knowledge:

- **Attempt:** Intuitive sensations.
- **Learning:** Search for causality and meaning.
- **Knowledge:** Practical know-how and understanding of causality.
- **Action:** Explanation and anticipation.
- **Problems:** Increasing complexity.

Deep Knowledge:

- **Attempt:** Deliberate and inclusive, with a spiritual dimension.
- **Learning:** Insights and intuitions.
- **Knowledge:** Profound understanding of patterns and the ability to recognize them.
- **Action:** Creation, intuitive thinking, and prediction.
- **Problems:** Highly complicated and nonlinear.

The Significance of Shallow Knowledge:

One particularly noteworthy characteristic of knowledge management is the increasing significance of shallow knowledge. With the rise of knowledge workers, the availability of vast information, advancements in computing and robotics, and frequent changes, shallow knowledge has gained prominence. This shift has come at the expense of surface knowledge, which held a larger share in the past. The acquisition of shallow knowledge equips knowledge workers with the necessary skills to navigate these frequent functional and operational changes effectively.

Distribution of Knowledge Levels:

To illustrate this changing landscape, let us examine the distribution of knowledge levels based on previous research conducted by the Bennets:

Surface Knowledge:

- Previous World (Research, 2000): 67.5%
- New World (Research, 2020): 25.0%

Shallow Knowledge:

- Previous World (Research, 2000): 25.0%
- New World (Research, 2020): 60.0%

Deep Knowledge:

- Previous World (Research, 2000): 7.5%
- New World (Research, 2020): 15.0%

Note that these numbers are approximate representations based on the charts in the book and rely on previous research conducted by the Bennets.

Types of Knowledge:

The Bennet couple presents a taxonomy of seven knowledge types contributing to understanding situations and taking action. These types are as follows:

1. **Metaknowledge:** Knowledge about knowledge itself, including its characteristics and flow.
2. **Descriptive knowledge:** Knowledge that answers questions about what, when, where, and whom.
3. **Guiding knowledge** for action.
4. **Practices:** Rules, heuristics, and explanations of how systems operate, among others.
5. **Research knowledge** and established knowledge.
6. **Strategic knowledge.**
7. **Learning knowledge:** Knowledge related to how to learn, how to unlearn (to facilitate new learning), and how knowledge expands.

The complexity of knowledge corresponds to the number of knowledge types it encompasses.

Knowledge Mobilization (KMB) involves eight stages associated with different types of knowledge. It begins with identifying the situation and gathering descriptive knowledge and contextual information. Then, it consists in comprehending the collected information and organizational aspects (metaknowledge) and considering theoretical and practical knowledge (research

knowledge and practices). Finally, it culminates in taking action guided by the acquired knowledge.

This process forms a new state of knowledge (descriptive knowledge). Feedback enables the evaluation of action effectiveness and learning from it (learning knowledge).

Awareness of Knowledge:

Simplifying knowledge into hidden knowledge residing in the subconscious and explicit knowledge living in conscious awareness, with implicit knowledge somewhere in between, may be tempting. However, the Bennets argue that knowledge is distributed throughout the brain, encompassing both conscious and subconscious domains. The boundaries between these domains are more distinct than one might assume. It can be argued that explicit knowledge is more readily accessible on the surface, while deep knowledge remains largely hidden. Shallow knowledge falls in between. Thus, the terms tacit, implicit, and explicit knowledge form a continuum and are not discrete entities.

The Human Brain and Knowledge:

Brain Structure:

The authors introduce two interconnected terms: mind and brain. We will not delve into the details of their differences and integration for abstraction.

Information in the brain is stored as patterns of neurons and synaptic connections, each possessing considerable strength. These patterns represent thoughts, images, perceptions, theories, emotions, etc. The bonds are physical, composed of atoms, molecules, and cells.

Learning occurs as we transform signals such as images, sounds, and smells into recognizable patterns that we associate with perceptions, objects, or external connections. These associations intertwine with internal patterns, which vary in their representation of external links.

External information blends and intertwines with internal information, giving rise to new patterns of neurons that represent understanding and meaning. The processes linking external and internal information include identification, recognition, sense-making, attributing meaning, and acquiring knowledge. These processes enable decision-making and action.

Storage of Knowledge - Brain Processes:

Perceiving the unknown varies from person to person. As mentioned, information is not fully stored; instead, we retain partial representations that form the basis for assumptions and memory reconstruction. The significance of something influences the number and strength of connections at a higher level. Memorization and repetition further reinforce these connections.

When confronted with a specific situation, opportunity, problem, or threat, its external and internal importance impacts the strength of connections and memory formation.

According to studies mentioned in Amen's book, stimulating the brain extends beyond physical and mental training and is achieved through social bonding. Bidirectional interactions with those around us influence our brains.

The literature suggests that an environment rich in intriguing ideas, visual stimuli, books, and more, leads to cortical thickening, cell expansion, and heightened cognitive activity. Environmental changes, sensory experiences, and learning physically impact us.

In every conversation that fosters shared understanding, the content and accompanying context are reimaged in the recipient's mind. Additionally, there are a few noteworthy points to consider:

1. Social connections reduce individual anxieties, foster trust, and open the mind to incoming information, enhancing the likelihood of understanding. Nurturing and caring relationships strengthen neural growth and facilitate knowledge creation. On the other hand, a lack of trust and rapport can prevent us from entrenching ourselves in our positions, hindering understanding and knowledge.
2. Optimal learning is encouraged by a certain level of positive stress. A lack of stimulation, or some may refer to as apathy, hampers development, while excessive stress can impede or even prevent learning by causing distress.

Application of knowledge

Reusing Knowledge:

To effectively reuse knowledge, it is crucial to acknowledge that its applicability is contingent upon context, including situational factors, which are one of the levels of context.

Our subconscious mind adapts knowledge to fit the specific situation when it is reused. Rather than storing all the details anew each time, the brain leverages

previous learnings and memories to fill in the gaps in incoming information, thus developing resilience and a profound understanding.

Problem-solving approaches, such as collaborative entanglement, operate similarly. When confronted with a new problem or situation, team members examine the partial information shared and identify how it connects to their past knowledge and learning. Drawing on patterns and markers consolidates this knowledge, fostering continuous improvement, cooperation, and adaptability.

Individual specialists also employ a comparable approach. A heightened level of awareness, a comprehensive understanding of the issues (including political aspects), and the ability to identify patterns enable them to thrive in dynamic environments. The depth of developed patterns (deep knowledge) correlates with their applicability across various situations and contexts.

The authors caution against the inherent bias we all possess, particularly experts, to rely solely on what has previously worked, sometimes disregarding the fact that the established pattern may not align with the new case. They emphasize that no absolute knowledge fits every situation and timeframe.

Utilizing Latent Knowledge:

To fully harness our tacit knowledge, the Bennets propose transitioning from ordinary consciousness to an exceptional state characterized by heightened awareness and a deep connection to the subconscious mind, including its memory and thought processes. This extraordinary consciousness enables us to access and retrieve the knowledge stored within our subconscious.

Tacit knowledge encompasses four subtypes: spiritual (moral, strategic, etc.), intuitive, emotional (sensations), and knowledge embedded within other knowledge.

To tap into tacit knowledge and leverage it effectively, the following methods are recommended:

1. Transforming tacit knowledge into surface knowledge:

1. Engaging in self-collaboration by actively listening and trusting our subconscious mind, self-reflection without judgment or hasty conclusions, and uncovering underlying assumptions that shape our thinking.
2. Practicing meditation.
3. Directing the dream process to solve problems that elude conscious thinking (lucid dreaming).
4. Immersing ourselves in music that evokes emotions and memories.
5. Facilitating integration between the right and left hemispheres of the brain (further details available in the book and its sources).

2. Embodiment of tacit knowledge:

1. Utilizing tools that allow for the application of tacit knowledge without explicitly revealing it, such as imitation, training, visualization, observation, experience (especially applicable to intuitive knowledge), and developing emotional intelligence.

3. Sharing tacit knowledge:

1. Enabling the sharing of tacit knowledge without fully disclosing it, fostering group learning and mentoring as effective tools for knowledge transfer.

4. Exposure to contrasts and diversity:

1. Encouraging exposure to well-founded differing and diverse opinions, promoting a climate of open-mindedness and inclusivity.

Organizational leaders and managers play a vital role in strengthening tacit knowledge and integrating methods for its utilization in decision-making processes. This can be achieved by fostering discussions around emotions, raising awareness among employees about the value of tacit knowledge and its significance, and supporting its continuous development.

At an organizational level, establishing knowledge communities and implementing mentoring programs can effectively harness and leverage tacit knowledge.

Development of Knowledge:

Knowledge serves as the bridge between the superconscious and subconscious realms in the brain, formed by the knowledge we possess. It operates in a continuous loop: knowledge begets knowledge, and the act of knowing inspires the creation of new knowledge.

Three essential levels of knowing are identified:

1. Knowing ourselves.
2. Knowing others.
3. Knowing the situation.

The U.S. Army, where one of the Bennet spouses served as a knowledge manager, has developed six principles that underpin their knowledge doctrine:

- Making decisions in complex situations necessitates new ways of thinking.

- The value of information lies in the decision maker's ability to act upon it, drawing on their values, knowledge, and wisdom (refer to the chapter on values below).
- We possess knowledge that we need to be fully aware of.
- Much of our knowledge resides in the subconscious mind.
- Mental and sensory capabilities can be strengthened through training.
- Organizational learning, knowledge centrality, shared values, effective collaboration, and the free flow of ideas support organizational knowledge.

The concept of knowledge revolves around cognitive abilities, encompassing absorption and processing to generate knowledge relevant to a given situation. To cultivate these abilities, the following skills need to be developed:

1. **Listening:** The capacity to hear and assimilate, involving three levels: alertness, decoding, and comprehension.
2. **Mindfulness:** Identifying and discerning what is relevant within our immediate or future needs from our environment.
3. **Scanning:** The ability to navigate vast amounts of information and select what is pertinent to us.
4. **Sensing:** Absorbing information from the external world through our senses and optimally translating it in the brain.
5. **Modeling:** Transforming the information we encounter into patterns, which includes adapting to existing patterns, updating them, or creating new ones.
6. **Integration:** Synthesizing information received at various levels and creating meaning.

In addition to optimal cognitive information processing, the authors present a list of processing capabilities that support the brain's knowledge development:

1. **Visualization:** Presenting information in a way that tells a story and guides us toward success. It involves imagination and observing from different perspectives.
2. **Intuition:** Maximizing and leveraging existing intuition based on past experiences to benefit the current context and situation.
3. **Evaluation:** Examining and assessing a situation concerning vision, purpose, goals, potential behaviors of others (e.g., competitors), and important aspects to prioritize and predict related outcomes.
4. **Decision-making:** The ability to make choices, draw conclusions, interpret, and apply heuristics or rules of thumb.
5. **Setting intentions:** Defining and aiming for broader meaning to focus our actions accordingly.

Wisdom:

Wisdom encompasses various definitions and is generally regarded as a higher level of knowledge. It is often associated with systematic thinking and develops over time through experiential processes. It emerges from a combination of acquiring new knowledge and engaging in experimentation.

Wisdom represents an elevated level of knowledge characterized by discernment. It enables us to extrapolate tacit information from one context and situation to form new knowledge applicable to another. It is inherently connected to our tacit knowledge.

Wisdom empowers us to question and critically analyze perceived truths, encouraging reflection and independent thinking about our reality.

This process of self-awareness, coupled with sharing, fosters the development of knowledge by:

- Moving away from closed and rigid perceptions.
- Sharing knowledge within specific domains and with target audiences.
- Enhancing awareness and fostering connections through knowledge sharing.
- Sharing new perspectives with others.
- Advancing knowledge for the betterment of humanity at large.
- Guiding others or assuming leadership roles based on wisdom.
- Engaging in a conscious process of creating and disseminating novel insights.

Looking beyond Personality

The authors present an intriguing analysis of personality patterns, drawing upon knowledge theory. Similar to knowledge, they propose that our personality is contingent upon context and situation. A mentally healthy individual typically possesses around 12 personality subtypes, which they activate based on their specific context and situation.

While this idea may initially seem far-fetched, let us provide an illustrative example to clarify its meaning. When we console a friend who has suffered a loss, even if we typically embody a tough and business-oriented persona, we naturally adapt our behavior to offer empathy and support. Similarly, our interactions with our children, spouse, and others may elicit different aspects of our personality. The person we are engaging with, our role in the relationship, and our adaptability to various situations all contribute to our display of distinct behaviors and personality patterns. These patterns are not solely determined by the situation itself but also reflect our tendencies and preferred approaches to handling specific contexts.

Furthermore, we may modify and refine some of these personality patterns as we undergo personal growth and development. Just as connections and situations influence knowledge, our personality patterns align with our knowledge and jointly shape our desired persona. By being aware of these patterns, we can make conscious choices and conduct ourselves more effectively.

Values:

Values serve as guiding principles, rules, or standards of good behavior, outlining what is important and less important. They can exist at the individual, organizational, or company level, representing what is considered worthy or desirable. Values are not static; they evolve, adapting to changing contexts and circumstances.

Similar to knowledge, values can be categorized into "what" and "how." They can also be classified as surface, shallow, or deep. Kohlberg's six levels of moral development correspond to the conventional levels of knowledge complexity, ranging from data to information to intelligence and so on.

The authors dedicate an entire chapter to analyzing key values that support the development, leverage, and utilization of knowledge within organizations. These values include integrity, empathy, transparency, participation, partnership, contribution, learning, and creativity. They can be divided into three levels:

1. The first level comprises integrity and empathy, foundational values. These values foster trust and mutual appreciation, laying the groundwork for developing and implementing future values.

2. The second level introduces transparency, which holds an intermediate position. It is a fundamental value like the first level and a practical operational value like those at the third level.
3. The third level encompasses operative values, including participation, collaboration, contribution, learning, and creativity. These values are actionable and serve as guidelines for practical engagement.

To conclude this chapter and summarize the entire book, the authors leave readers with an intriguing point to ponder: While the development and utilization of knowledge can be considered valuable, knowledge itself is not inherently valuable. The value of knowledge is context-dependent and situation-dependent, as per its definition. This raises an important question regarding managing knowledge and offering it to employees. We leave this as an open question for readers to contemplate.