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## Creative brainstorming and integrative thinking: skills for twenty-first century managers

### Journal Item

How to cite:

Karakas, Fahri and Kavas, Mustafa (2008). Creative brainstorming and integrative thinking: skills for twenty-first century managers. *Development and Learning in Organizations*, 22(2) pp. 8–12.

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Version: Accepted Manuscript

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## **Creative Brainstorming and Integrative Thinking: Skills for 21<sup>st</sup> Century Managers**

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**Purpose:** The purpose of this paper is to introduce examples and methods of incorporating creative brainstorming and integrative thinking skills into training programs.

**Design:** The paper discusses an innovative training program as a case study to demonstrate the application of creative brainstorming and thinking skills into the design of the program.

**Findings:** Interdisciplinary thinking, engagement, flexibility, individual customization, collaboration and inspiration are critical to the development of creative and integrative thinking skills for managers.

**Value:** This paper opens up new possibilities for innovation and customization in training programs to develop creative thinking skills.

**Practical Implications:** This paper invites trainers and practitioners to consider new perspectives and customized approaches to develop creative and inter-disciplinary thinking skills for managers.

**Key words:** Creativity, brainstorming, integrative thinking, innovation, training programs.

Word count: 1208

Type of paper: Case Study

Quotes:

*“Our world is becoming more knowledge intensive, fast-paced, diverse, chaotic, interconnected, and multicultural. In such a world, we need new ways of thinking, learning, and development in organizations.”*

*“Interdisciplinary thinking, engagement, flexibility, individual customization, collaboration and inspiration are critical factors for the development of creative and integrative thinking skills for managers.”*

## **Creative Brainstorming and Integrative Thinking Skills for 21<sup>st</sup> Century Managers**

We are experiencing global uncertainty, chaos, change, speed, and complexity. We live in an era of corporate scandals, technological shifts, globalization, hyper-competition, ecological vulnerability, global warming, and post-modern terror. Our world is becoming more knowledge intensive, fast-paced, diverse, chaotic, interconnected, and multicultural. In such a world, we need new ways of thinking, learning, and development in organizations.

Integrative Thinking is defined as the ability to constructively reconcile the tensions of opposing models, and instead of choosing one model at the expense of the other, generating a creative resolution and a holistic model that contains elements of the individual models, but goes beyond them. The integrative thinking model is based on four steps: salience, causality, architecture, and resolution.

Successful business leaders build their integrative thinking skills to achieve their success. They develop and utilize messy models to understand and act in an increasingly turbulent world. They think beyond the boundaries of a single discipline to see the big picture. They integrate knowledge from seemingly disparate areas to make sense of the world around them. Integrative thinking and creative brainstorming necessitate a high tolerance for change, innovation, openness, flexibility and chaos.

We developed a seven-week management trainee program (delivered to 25 professionals in each session) at Bogazici University in Turkey and at McGill University in Canada.

This program was designed from scratch as a seminar that builds on the following principles:

- interdisciplinary focus,
- integrative thinking,
- creative brainstorming,
- individual customization and mentoring,
- participation and collaboration using web 2.0 tools

The training program turned out to be a transformational learning experience as well as a journey of development and growth for both participants and the trainers. During the course of seven weeks, we had intensive brainstorming sessions and professional development workshops to help participants develop and apply integrative thinking and creative brainstorming skills for the 21st century. We focused on trans-disciplinary, innovative and futuristic perspectives on human behaviour, organizations and management.

We drew from a new paradigm for managerial practice called Positive Organizational Scholarship (Cameron, Dutton & Quinn 2003). The core premise of this paradigm is that management excellence is fundamentally tied to creating/enabling organizational contexts that build human strengths and unlock the positive and generative dynamics of vibrant human communities We gave a special emphasis to:

- applications and hands-on experience in using creative brainstorming and integrative thinking skills;
- changing paradigms and new mind-sets for global managers and leaders of the future;
- creative, innovative, integrative, interdisciplinary, dynamic, and holistic thinking.

All the program evaluations turned out to be significantly higher than other comparable training programs (e.g. “Stimulation of interest” score was 4.7 out of 5.0; while the average score of other programs is 3.8.) Participants ranked the program “among the best” with the score of 4.8, compared to 3.6 average score for other training programs offered this year. We believe the program was successful because of a combination of unique design features and instructional methods:

- Participants were able to develop management skills in relatively short time by experiential learning and applied projects based on craft work and tacit knowledge. Providing them a supportive platform and customized guidance were essential critical factors here.
- A variety of methods have been used to simulate the 21<sup>st</sup> century business environment such as collaborative learning, cases, videos, discussions, role plays, games, board meetings, and project teams.
- Training content was updated continuously to reflect innovative and new knowledge. Participants received more than 800 pages of resources containing relevant, practical, and timely knowledge.

- Participants followed global business conferences in a timely manner. For example, TED (Technology, Entertainment, Design) gatherings in California bring together visionary thinkers and leaders of the world. Participants followed and shared up-to-date presentations of TED.

## **Sample Projects**

### ***Creative Mind-works***

In this project, participants have written articles to be published in business magazines and media. This project enabled them to enlarge their vision by brainstorming about breakthrough global issues related to management and organizations. They had the freedom to select subjects they felt passionate about. The idea was to find inspiring, interesting, innovative, intriguing ideas. We met with each of the participants and talked about what potential topics they might be interested in. Participants built analogies between management and as diverse fields as Music, Arts, Biology, Information Technologies, Quantum Physics, Health Care, Agriculture, Architecture, Psychology and Sociology. The topics varied from String Theory to the collective behaviour of ants or bees. Just to give an idea, some of the titles of the articles were the following:

- The Emperor Penguin as a Model for Corporate Teams,
- Building Bridges: Corporation / Management and Architecture / Keystone,

- The 21st Century Organization: Designed from the Human Body,
- Social Innovation and Management: The Advancement of Social Entrepreneurship in the Developing World,
- The 2.0 Business.

### ***100 concepts for the 21<sup>st</sup> Century***

During the training program, we wrote a book with participants, called “100 Concepts for the 21<sup>st</sup> Century”. We first conducted a series of intensive brainstorming sessions on the 21<sup>st</sup> century where participants reflected on new changes and trends in the 21<sup>st</sup> century. Following a process of two weeks of collaborative work, we formulated a list of top 100 concepts for managers and professionals to enable them to better understand and prepare for the 21<sup>st</sup> century. Participants acted as co-authors and wrote about concepts that inspired them. The result was a holistic, visionary, futuristic and trans-disciplinary list consisting new concepts related to management, organizations, business, economics, society, science, psychology, technology, innovation, arts, politics, and the global agenda. It included new trends, innovative developments, fresh perspectives or practices critical for the 21<sup>st</sup> century leader; including social innovation, global corporate citizenship, appreciative inquiry, complexity sciences, web 2.0/web 3.0, quantum skills, and nano-bio convergence.

### ***Integrative Artwork***

In this project, participants summarized and integrated what they have learned in this training program *creatively and insightfully*. They did this in a personalized way that made sense to them. There were no format requirements or restrictions. Participants were encouraged to consider innovative formats. They used their best creative skills and talents. Thinking out of the box; they created pictures, art work, visual models, stories, concept maps, web pages, videos, journals, book drafts, CDs and creative thinking games. Many projects surpassed our expectations in terms of insight, integration, and synthesis. We organized an exhibition of these projects on our final ceremony. You should see and touch these pieces of art to get a feel for them; nevertheless, below are the brief descriptions of some:

- Works of art demonstrating spiral, integrative, holistic, and creative thinking;
- An art gallery of compelling images for the 21<sup>st</sup> century;
- A creative thinking game designed for future learners (32 different levels of difficulty);
- A draft book called: “The Survival Book: What it is to be a Human in the 21<sup>st</sup> Century”
- A recipe for creative thinking in the 21<sup>st</sup> century (prepared in a cook book format)
- A holistic concept map consisting of 150 different models and concepts all linked together
- A Comic Book: “A Caveman in the 21<sup>st</sup> Century”
- A creative personality test and journal delving into the lives of nine personalities and illustrating different thinking styles

- Integration of creative thinking tools and self-assessment using web 2.0
- A “Thinking-out-of-the-box” box including integrative thinking and learning cards, sketches, models

### **Conclusion**

This paper introduced various examples and methods of incorporating creative brainstorming and integrative thinking skills into training programs. The paper suggests through the training cases that interdisciplinary thinking, engagement, flexibility, individual customization, collaboration and inspiration are critical factors for the development of creative and integrative thinking skills for managers.

#### References:

Cameron, Dutton & Quinn (2003) : Positive Organizational Scholarship: Foundation for a New Discipline, San Francisco Ca, Berrett-Kohler (for further resources on POS, see <http://www.bus.umich.edu/positive> )