Critical Thinking, Creative Thinking, and Problem Solving

Course Summary

Description

This course develops the ability to apply proven creative and critical thinking tools and techniques to focus on solving problems innovatively and with a business focus.

This is a two-day, instructor led, intermediate level classroom course with interactive lectures, fun exercises, and extensive practical applications in thinking techniques.

Objectives

After taking this course, students will be able to:
- Differentiate between complicated and complex issues
- Apply the principles of design-thinking to their work in solving problems
- Distinguish left brain (critical) thinking from right brain (creative thinking), and the role each play in problem-solving
- Recognize and use tools and techniques to support creative problem-solving
- Apply techniques to generate creativity (diverge)
- Recognize and act on the need to identify the best solution (converge)
- Communicate creative and critical ideas, thoughts and solutions effectively to others with different thinking style preferences
- Work towards transforming innovative ideas into business focused solutions
- Implement a personal plan to continue to stimulate creative and innovative thinking

Topics

- Introduction to the Course
- Whole Brain Thinking
- Right Brain Creative Thinking / Unstructured Thinking
- Left Brain Critical Thinking / Structured Thinking
- Developing Personal Creativity

- Whole Brain Thinking and Problem Solving
- Seven Steps to Creative Problem Solving
- Polarity Management
- Design Thinking – The New Wave of Creativity
- Conclusion and Action Planning

Audience

This course is designed for those wanting to learn a creative approach to business problem-solving.

Prerequisites

There are no prerequisites for this course.

Duration

Two days

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Course Outline

I. **Introduction to the Course**
    A. Format: Introductory Game and Introduction to the course.
    B. Participants and introduced to the course through an introductory game. They are then provided the outline for the course, review the formal course objectives, and set their personal objectives for the course.

II. **Whole Brain Thinking**
    A. Format: Lecture and Group Discussion.
    B. Participants are introduced to the concept of whole brain thinking which includes left brain, right brain and whole brain thinking – how we process ideas, problems, and make sense of things – adapted from Herrmann Brain Dominance theory.

III. **Right Brain Creative Thinking / Unstructured Thinking**
    A. Format: Interactive Group Discussion & Practical Application Exercises.
    B. Participants learn what creative thinking is and explore and practice a variety of creative thinking tools and techniques. Participants then explore how and when each technique might be used in real-world problem-solving requiring the development of innovative and creative ideas.
    C. Applicable TED Talks are used to stimulate the discussion.

IV. **Left Brain Critical Thinking / Structured Thinking**
    A. Format: Interactive Group Discussion & Practical Application Exercises.
    B. Participants learn what is critical thinking and how it differs from creative thinking, and explore and practice a variety of critical thinking tools and techniques. Participants also explore how and when each critical thinking technique might be used in real world problem-solving requiring critical thinking.
    C. Applicable TED Talks are used to stimulate the discussion.

V. **Developing Personal Creativity**
    A. Format: Interactive Group Discussion.
    B. Participants discuss techniques and exercises they can use to continue to develop personal creativity, and how they can help others develop their creative and critical thinking skills.

VI. **Whole Brain Thinking and Problem Solving**
    A. Format: Interactive Group Discussion & Application Exercise.
    B. Participants discuss how to apply a business mindset to transform innovative ideas into implementable business solutions. Includes a discussion and practical exercise on how to communicate and present innovative ideas to a business owner.

VII. **Seven Steps to Creative Problem Solving**
    A. Format: Interactive Group Discussion and Experiential Learning
    B. Participants work systematically through seven steps that support converging to ensure you are solving the right problem, diverging to generate ideas and explore possibilities, and converging to land on an optimal solution. Using a case-study approach, they practice various tools and techniques that support problem solving in the work setting. Participants go through exercises and activities for each of the tools and techniques (i.e. Brainstorming, association)

VIII. **Polarity Management (Key Learning and application topic for this course)**
    A. Format: Interactive Group Discussion and Practical Application
    B. Participants explore possibilities; where there is not one clear solution to a problem. Using Polarity Management, they explore how to maximize the upside of all options. To deepen understanding, they apply the polarity model to a simple business problem – e.g. creating a flexible work environment.

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Course Outline (cont'd)

IX. Design Thinking – The New Wave of Creativity (Key Learning and application topic for this course)
   A. Format: Short Lecture and interactive group discussion
   B. Participants are introduced to the problem-solving approach called now trending as Design Thinking. They discuss and apply whole brain thinking concepts to each phase of the process.

X. Conclusion and Action Planning
   A. Format: Group Discussion and Learning Review
   B. Participants review the topics covered in the day. Participants are also asked to state their key learnings from the course, and to reflect on and write down one new thing they intend to put into practice upon returning to their workplace. They are encouraged to share this "one thing" with an accountability partner in the class, and with their manager/supervisor.