Critical Thinking for Problem Solving, Decision Making
Core and Advanced Tools

Workshop #351 – Two days - On-Site - Customized

Critical Thinking is a method of analyzing and looking at problems, decisions, and goals. This results in faster decisions, more creative and innovative solutions, and higher quality deliverables. Critical thinking has an immediate positive impact for solving current problems, and has significant long term benefits with business issues, goals, and strategies. Imagine the benefits when people are "Thinking" at a new level.

This customized interactive two-day workshop provides attendees with an excellent foundation framework and set of pragmatic tools and techniques for Critical Thinking in a variety of situations. The participants practice these tools in exercise sessions using a real individual business issue. Templates, called Thinksheets, are used as a guide for thinking, both in the class, and to aid future out of class use. In addition, this course will include being a Thinking Coach (i.e. leading others to think) and advanced critical thinking and innovation components, such as, Credibility and Consistency, Risk, Thinking outside-the-box, Presenting solutions for enrollment and approval.

Our Customization

While Critical Thinking isn't difficult, the learning is most effective when tailored and practiced within a familiar area of focus and real world situation. Prior to the workshop, we meet with some of the attendees to obtain an understanding of the work they do and specific objectives and challenges they have. With this, we create relevant examples and exercises for the workshop. Using their issues and challenges, as well as the functional areas focus and seniority of the attendees, we customize:

- The appropriate techniques and content most effective for the attendees
- The examples and break-out exercises used in the workshop

Benefits for Participants of this workshop

- Clarity of thought for understanding a problem and situation
- Superior and innovative ideas and solutions to problems, goals, and strategies
- Faster and higher quality decisions that are more impactful
- Better understanding of the dynamics between different aspects of a business or project
- Higher productivity and quality
- Better prepared to tackle difficult problems and make decisions on a daily basis
- Creating an environment for innovative thinking
- Clear presentations of solution options to decision makers
- Leadership skills for helping others think critically

Examples of where these skills can be applied include:

- Improved processes and quality
- General problem solving and decision making
- New product ideas and creation
- Project management
- Revenue generation and cost reduction strategies
- Process design
- Short and long term business strategies
- Crisis management
- Improved operational efficiency
- Engineering designs
- Customer care improvement
- Leading people and teams

Not your average Class or Seminar!

Unlike most classes that are taught in "academia" style and content, our workshop is about applying critical thinking tools and techniques in the real world on your actual business problems. Tools and Techniques are taught, and then practiced in class, on the problems you bring. Then, when you return to the workplace, you already know how to apply what you just learned.

Critical Thinking Training - *An investment that raises the overall performance and leadership of an individual and organization.*

Critical Thinking for Problem Solving and Decision Making
Core and Advanced Tools

Overview: This two-day workshop provides attendees with an excellent working foundation and set of tools and techniques for Critical Thinking in a variety of situations. The participants practice these tools in exercise sessions using their real individual business issues. Templates, called Thinksheets, are used as a guide for thinking, both in the class, and to aid future out of class use.

Prior to the class we will interview some of the attendees so that we can customize the workshop with relevant examples and exercises, and adjust the content focus to meet the objectives of the workshop organizers.

Learning Objectives: After completing this course, you will be able to:

Day 1:

- Distinguish "Automatic" Thinking from "Manual"
- Understand a Framework for Thinking Critically and apply the 3 step Critical Thinking Process
- Learn and practice a variety of tools to think critically including the use of Thinksheets to:
  - Get Clear on a Problem, Situation or Goal
  - Guide your thinking for Conclusions
  - Guide your thinking for Decisions
- Leave the day knowing how to ask questions (Socratic) to get yourself and others to think critically

Day 2:

- Learn additional tools and practice for leadership critical thinking
- Apply critical thinking to decisions that are not black and white
- Understanding and coping with Risk and learn a Risk Model
- Enroll others with your ideas; Present, Persuade and Defend decisions
- Be a Thinking Coach - Introduction
- Innovation - Learn techniques to help others innovate and generate new ideas, including "outside the box", "abductive" and "impossible" thinking.
- Identify where you can apply Critical Thinking in your job, and with your team and create a next steps plan

Course Outline:

We focus on the 3 major components of critical thinking related to problem solving and decision making (also see diagrams in this document). These are:

- Clarity of issue, problem, or decision. The most important step in critical thinking.
- Conclusions – 99% of conclusions are Inductive reasoning. This includes; Facts, Observations, Experiences, Beliefs, Assumptions. We show how these components form conclusions.
- Decisions – Attendees learn that the decision process is very different than reaching a conclusion and that quality decisions require two elements to be present.

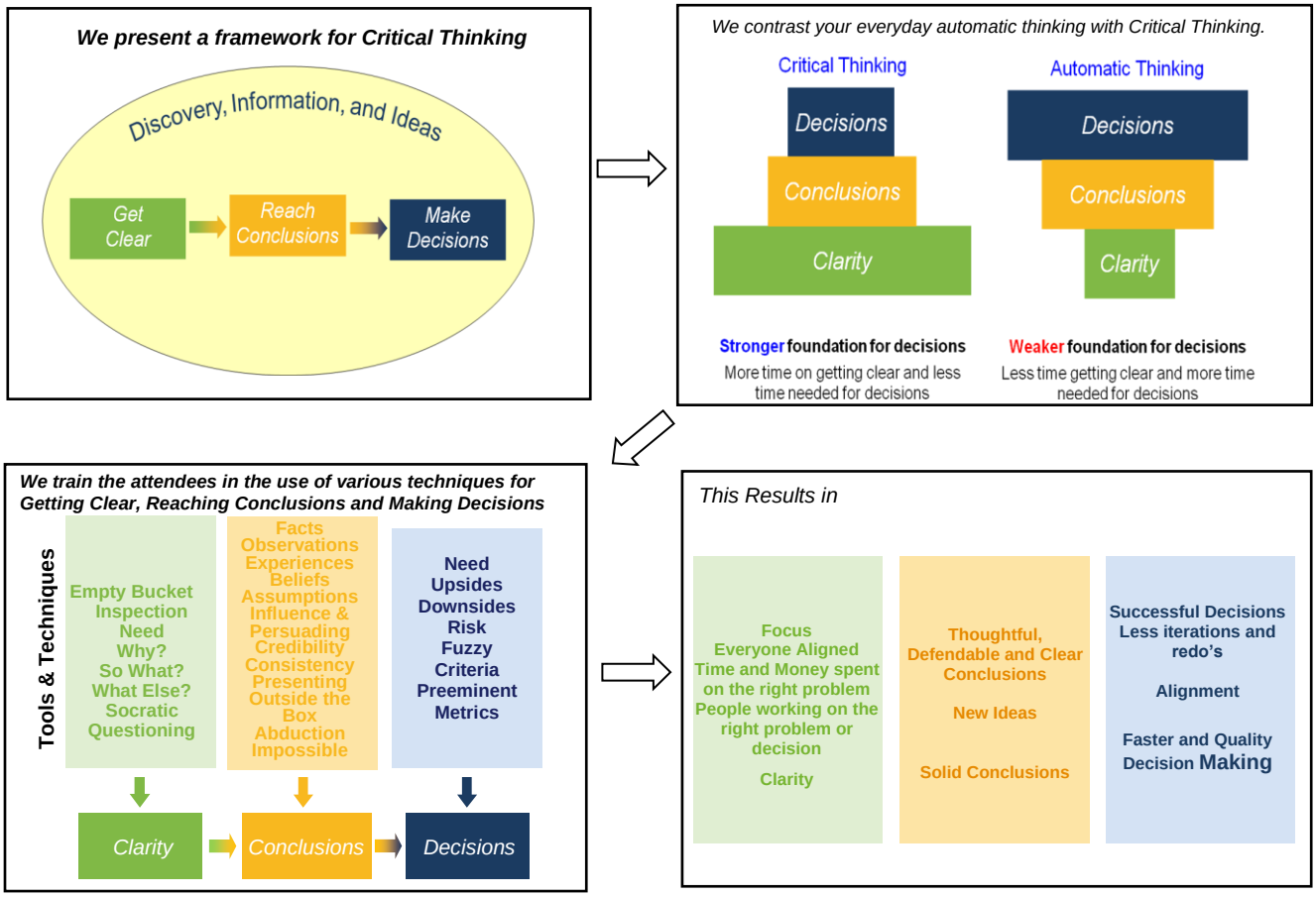
Topics Covered:

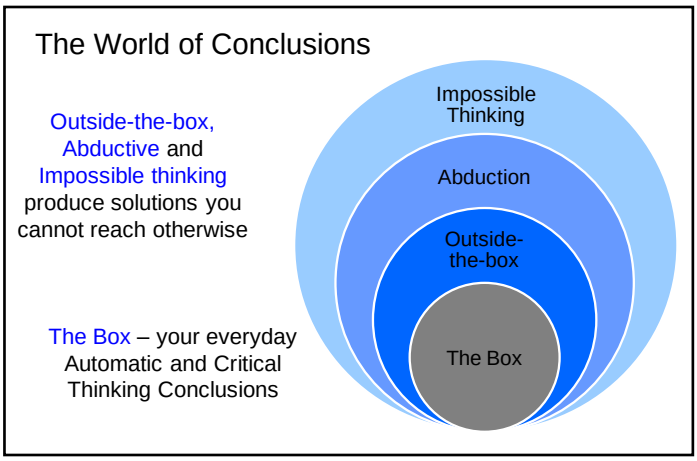
- Distinguishing “Automatic” Thinking from “Manual Thinking”
- Benefits of Critical Thinking
- Empty your bucket
- Clarity - “Get Clear” on a problem to solve or decision to make, and the Clarity Thinksheet
    - Inspecting the problem statement
    - The tools of Socratic Questioning; Why, So What, Anticipatory Thinking
    - Need vs. Want
    - A Family of HeadScratchers
- Conclusions - Create Solutions and the Conclusion Thinksheet
    - Applying Inductive & Deductive thinking.
    - Understanding the Premise that leads to a conclusion and how personality affects this.
    - How facts, assumptions, experiences, beliefs, and observations affect your thinking
    - Why people come to different conclusions and what to do about it.
    - Credibility and Consistency - Increasing the strength of your premise
    - Triangular Thinking – When you can’t know exactly
    - Using Critical Thinking to Influence and Persuade
    - Argument Analysis – Review for and against arguments as elements of conclusions
    - Presenting your solutions
    - Role Play
- Innovation - Creating an environment and stimulating creativity and innovation
    - Thinking Outside-the-Box - Challenging the Premise (What if?, What other?)
    - Abductive Thinking - Thinking beyond your experience
    - Impossible Thinking -To generate Breakthrough ideas
- Decisions - Taking action and the Decision Thinksheet
    - The Elements of Decision; Who, When and Criteria
    - Preeminent Metrics – What can be measured that can act as an early warning system and gives you the time to change direction and the outcome
    - Risk Criteria – A 11-point Risk model that helps you evaluate the risk and your personal risk level w/exercises (Downsides, Downside Probability, Upside, Upside Probability, Downside Absorption Capability, Ignoring Statistical Downside, Controllability, Necessity of Upside, Reversibility, Mitigation Strategy, Preeminent Metrics)
    - Fuzzy Criteria – Not all the criteria of a decision are black and white. This topic looks at the grey ones
- Thinking Coach
    - Introduction
- Next Steps - Your plan to implement your learning (for yourself and your team)

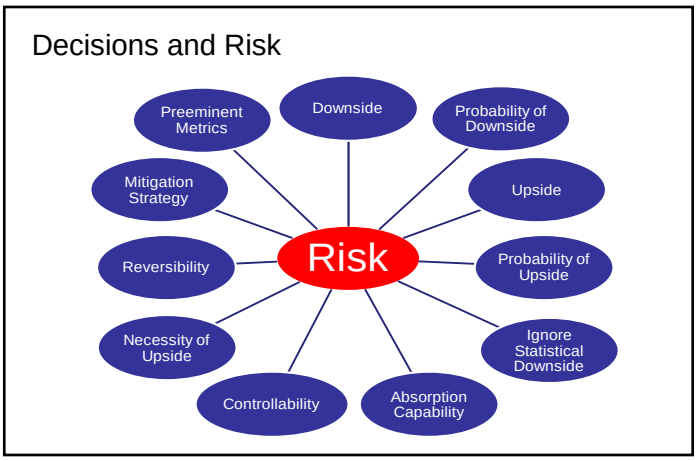
Materials attendees will receive:

- A workbook containing
    - Copy of slides used in the course
    - Helpful hints
    - An appendix - List of places to use critical thinking and 100 questions to ask
    - Thinksheets that guide participant through the critical thinking process
    - Blank Thinksheets that can be used post course
- A free subscription to The HeadScratcher Post, a monthly, one page, thought provoking Newsletter about some technique or tool related to Critical Thinking.
- A copy of “Think Smarter” book, authored by Mike Kallet, CEO of HeadScratchers
- Laminated sheets containing summary of tools and our “The 10 minute Thinksheet”

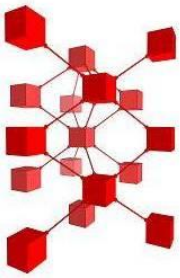
HeadScratchers Critical Thinking Framework



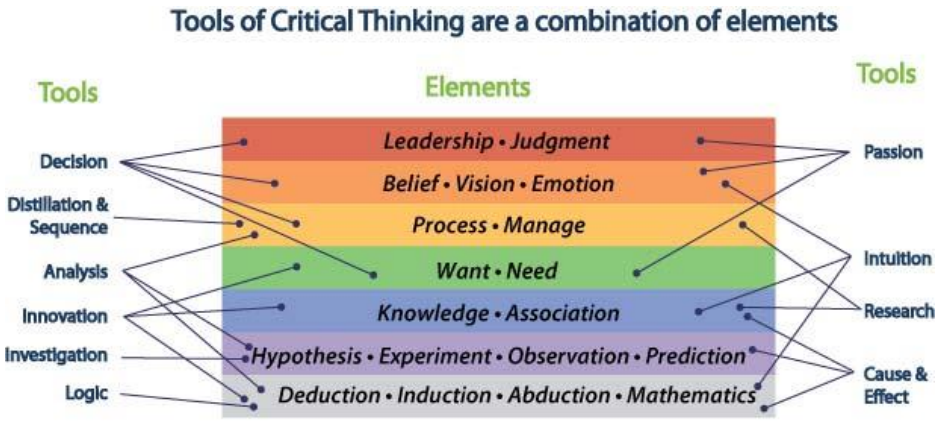




The Model



While we do not train attendees in the specifics of the model, below is an overview of the "elements" and "tools" used in thinking. Building on this foundation, we present numerous successful "techniques" for problem solving. The attendees practice these newly learned techniques using their current business challenges.



You can read more about the model and critical thinking techniques on our website at www.headscratchers.com

The tools are combined with the framework into Techniques (see examples below)

Getting Clear	Clarity of problem, goal and decision is the start and most important step in Critical Thinking
Reaching Conclusions	The role that Inductive reasoning plays in reaching a conclusion: Facts + Observations + Experiences + Beliefs + Assumptions yields Conclusions
Necessity	Distinguishing Need from Want. Wants might get things started, but need gets things done.
Empty your Bucket	There's no room in a filled bucket for critical thinking and creativity
Decision Making	Need and Criteria are the ingredients behind Decisions. Both have to be present for quality decisions
Asking "Why" and "So What?"	"Why?" is a tool for discover. "So What?" gets people thinking about what the consequences, value, interdependencies and impacts there are.
Listening to Answers	Asking the right questions is important and so is listening to the answer
Influence and Persuade	What happens when there are multiple conclusions?

Who should attend this course?

Critical Thinking can be used for general problem solving and decision making, as well as specific tactical and strategic business issues. Thinking is the foundation of everything that everyone does, so it's no surprise that Critical Thinking benefits everyone. This workshop is applicable for the business professional in the role ranging from a senior individual contributor to supervisor, manager or director. We have trained employees from every department (Marketing, Sales, Development, Operations, Customer Care, Finance, IT, etc), and in just about every job responsibility, at every level (individuals to CEO), and in just about every industry.

Duration:

Two days, usually from 8:00 A.M. to 4:15 P.M.

Delivery Method:

Group-Live, On-Site at your location
Maximum of 25 Participants per class

Prerequisite: At least 5 years experience in the workplace with 2 plus years of leading projects or people.

How we prepare for the Workshop:

Some of the participants, or the sponsor, organizer, or manager(s) of a team, are interviewed (via phone) for about 20-30 minutes with questions about the participant's responsibilities and the scope of the problems they resolve, and decisions they make. Alternatively, this can be in the form of a questionnaire. From these interviews we tailor the content, break-out exercises and examples to be relevant for the participants and to maximize the learning.

How you prepare for the Workshop:

We suggest participants come to the workshop with a few tasks, problems or goals from their work. The workshop is fast passed and builds upon the learning, so the participants should plan and devote the full day for the class. Of course, we understand if an urgent matter occurs.

If the culture is such that the participants will perform pre-work, we'll ship "Think Smarter" the book, prior to the class and ask for a few chapters to be read. In this way we can spend less time introducing some of the tools and more time devoted to exercises that practice them.

Multiple curriculums for varied attendees:

In addition to customizing the content, we also vary the approach to accommodate various configurations of attendees and needs. These include:

- Critical Thinking for Product Teams
  For Product and Process teams that are tasked to create new solutions we put more emphasis on Innovation and Presenting ideas and solutions

- Critical Thinking for Senior Leaders
  For managers of people or projects. We'll put additional emphasis on being a Thinking Coach and creating the environment for Innovation and Decision making.

- Critical Thinking for Intact Teams
  For Managers or Leaders along with their direct reports. The emphasis and exercises are focused on using critical thinking techniques on a team issue, such as a strategy, new product or process effort. The emphasis of this workshop will depend upon the functional area. For example, when training an audit team, Risk will be of great interest. When training an R&D team, Innovation will be of more interest. When training a project management team, Influencing and Persuading may be of higher interest.

Complete curriculum customization is available for special needs or for a mixture of attendees.

How to Arrange for a Workshop

For on-site workshops, fees and scheduling please contact:
Mike Kallet
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720-493-8567

Contact Information:

For more information about the workshops please contact us at 720-493-8567 or info@headscratchers.com or visit our website at www.headscratchers.com

HeadScratchers LLC
Critical Thinking Techniques for Problem Solving, Decision Making and Creativity

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