Critical Thinking for Problem Solving and Decision Making
Workshop #201 - One day - 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 one 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.

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

Examples of where these skills can be applied include:

- Improved processes and quality
- General problem solving and decision making
- New product ideas and creation
- Short and long term business strategies
- Crisis management
- Improved operational efficiency
- Revenue generation and cost reduction strategies
- Customer care improvement

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

Overview: This one day workshop provides attendees with an excellent 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, not only with relevant examples and exercises, but so we can adjust the content focus to meet the objectives of the workshop organizers.

Learning Objectives: After completing this course, you will be able to:
- 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 to get yourself and others to think critically
- Identify where you can apply Critical Thinking in your job 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
  - Need vs. Want
  - A Family of HeadScratchers
- Introducing “Being a Thinking Coach”
- Conclusions - Create Solutions and the Conclusion Thinksheet
  - Applying Inductive & Deductive thinking.
  - How facts, observations, experiences, beliefs and assumptions affect your thinking
  - Why people come to different conclusions and what to do about it.
  - Using Critical Thinking to Influence and Persuade
- Decisions - Taking action and the Decision Thinksheet
  - The Elements of Decision; Who, When and Criteria
  - Upsides and Downsides
- Next Steps - Your plan to implement your learning (for yourself and your team)
We present a framework for Critical Thinking

Discovery, Information, and Ideas

Get Clear → Reach Conclusions → Make Decisions

We contrast your everyday automatic thinking with Critical Thinking.

**Critical Thinking**
- Decisions
- Conclusions
- Clarity

**Automatic Thinking**
- Decisions
- Conclusions
- Clarity

**Stronger foundation for decisions**
More time on getting clear and less time needed for decisions

**Weaker foundation for decisions**
Less time getting clear and more time needed for decisions
We educate the attendees to use a variety of techniques for getting Clear, reaching Conclusions and making Decisions

**Tools & Techniques**

- Empty Bucket Inspection
  - Why?
  - So What?
  - Need
- Socratic Questioning
  - Listening to the Answer
  - Broader/Subordinate

**Facts**
- Observations
- Experiences
- Beliefs
- Assumptions

**Need**

**Criteria**

**Clarity**

**Conclusions**

**Decisions**

*This Results in*

- **Focus**
  - Everyone Aligned
  - Time and Money spent on the right problem
  - People working on the right problem or decision
  - Clarity

- **Thoughtful, Defendable and Clear Conclusions**
  - New Ideas
  - Conclusions

- **Faster and Quality Decision Making**
  - Less iterations and redo’s
  - Alignment
  - Decisions
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.

Tools of Critical Thinking are a combination of elements

<table>
<thead>
<tr>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decision</td>
</tr>
<tr>
<td>Distillation &amp; Sequence</td>
</tr>
<tr>
<td>Analysis</td>
</tr>
<tr>
<td>Innovation</td>
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<tr>
<td>Logic</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership • Judgment</td>
</tr>
<tr>
<td>Belief • Vision • Emotion</td>
</tr>
<tr>
<td>Process • Manage</td>
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<tr>
<td>Want • Need</td>
</tr>
<tr>
<td>Knowledge • Association</td>
</tr>
<tr>
<td>Hypothesis • Experiment • Observation • Prediction</td>
</tr>
<tr>
<td>Deduction • Induction • Abduction • Mathematics</td>
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</tbody>
</table>

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)

<table>
<thead>
<tr>
<th>Technique</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting Clear</td>
<td>Clarity of problem, goal and decision is the start and most important step in Critical Thinking</td>
</tr>
<tr>
<td>Reaching Conclusions</td>
<td>The role that Inductive reasoning plays in reaching a conclusion: Facts + Observations + Experiences + Beliefs + Assumptions yields Conclusions</td>
</tr>
<tr>
<td>Necessity</td>
<td>Distinguishing Need from Want. Wants might get things started, but need gets things done.</td>
</tr>
<tr>
<td>Empty your Bucket</td>
<td>There’s no room in a filled bucket for critical thinking and creativity</td>
</tr>
<tr>
<td>Decision Making</td>
<td>Need and Criteria are the ingredients behind Decisions. Both have to be present for quality decisions</td>
</tr>
<tr>
<td>Asking “Why” and “So What?”</td>
<td>“Why?” is a tool for discover. “So What?” gets people thinking about what the consequences, value, interdependencies and impacts are.</td>
</tr>
<tr>
<td>Listening to Answers</td>
<td>Asking the right questions is important and so is listening to the answer</td>
</tr>
<tr>
<td>Influence and Persuade</td>
<td>What happens when there are multiple conclusions?</td>
</tr>
</tbody>
</table>
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 thinking tip about some technique or tool related to Critical Thinking.
- A copy of “Think Smarter” book, authored by Mike Kallet, CEO of HeadScratchers
- Laminated sheet containing summary of tools and our “The 10 minute Thinksheet”

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 an individual contributor to senior leader. 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:
One day, usually from 8:00 A.M. to 4:15 P.M.

One and one-half and two day workshops: While the one day workshop is extremely effective, we do conduct longer versions of this workshop depending upon our client’s objectives. For example, when we train intact teams (manager and their team), in addition to the one day of training and practice, they may request a “deep dive” on additional team issues, such as a specific project plan, or yearly budget or business plan, or strategic initiative. The longer workshop allows more time for exercises and practice.

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

Prerequisite: At least 2 years experience in the workplace.

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 participants 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.

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 Performance**
  For individual contributors in all disciplines. Course content, examples and exercises weighted towards individual productivity, performance, decisions, and problem solving.

- **Critical Thinking for Leaders**
  For managers of people or projects. Course content, examples and exercises focused on both individual performance, and also as a manager of people and projects.

- **Critical Thinking for 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. For example, a customer care director and staff challenged with improving customer satisfaction while lowering costs; A product development manager and team charged with shortening a development cycle; A Marketing VP and team tasked to create a new competitive strategy; A CEO and staff working on a 5 year plan or managing a crisis.

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
mike.kallet@headscratchers.com
720-493-8567

We occasionally conduct open enrollment workshops please visit [http://www.headscratchers.com/Open_Enrollment_Workshops.html](http://www.headscratchers.com/Open_Enrollment_Workshops.html) for the latest schedules and registration information.

**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

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