

Critical Thinking Skills

REPRODUCIBLE TRAINING LIBRARY

Customizable Soft-Skills Courseware



Instructor Guide Half-Day Program

Critical Thinking Skills • Instructor Guide



Published by HRDQ 827 Lincoln Avenue, Suite B–10 West Chester, PA 19380 Phone: (800) 633–4533 Fax: (800) 633–3683 HRDQstore.com

This program is distributed under the terms and conditions of the HRDQ Reproducible Content End User License Agreement. Visit HRDQstore.com/legal for details.

ISBN 978-1-58854-655-5

2710E1CTS

EN-01-JA-16

The Microsoft name, Word[®], PowerPoint[®], and Outlook[®] are the property of Microsoft Corporation.

Cover image copyright © 2013 by Yuri Arcurs. Used under license from Shutterstock.com.

Disclaimer: HRDQ materials are provided "as is." HRDQ disclaims any warranties, expressed or implied, regarding their accuracy or reliability, and assumes no responsibility for errors or omissions. To the extent permissible by law, HRDQ accepts no liability for any injuries or damages caused by acting upon or using the content contained in its publications.

About the Reproducible Training Library

HRDQ's Reproducible Training Library (RTL) offers an unrivaled range of training programs that combine quality and affordability. These learning solutions are designed using proven adult-learning methods and offered at a price that will extend your training budget a lot further than you can imagine.

Structured as instructor-led programs, the RTL provides ready-to-use content on the topics and skills most needed in today's organizations. What's more, once you purchase and download an RTL product, it's yours to keep, customize, and use over and over again.

Affordable Classroom Training

It takes 43 hours to develop a single hour of instructor-led training, according to research conducted by the Chapman Alliance.¹ For a half-day workshop (the minimum length of a classroom program in the RTL), this translates into a development cost of \$23,736, significantly more than it costs to purchase the entire RTL collection.

In addition to being cost-effective, the RTL allows you to tap into a wide range of expertly developed training designs, each complete an instructor guide, participant guide, and a slideshow presentation. With just a few clicks of the mouse, you can download the Microsoft Word and PowerPoint files to your desktop within a matter of minutes.

"I was able to go from unzipping the RTL files to delivery in less than 2 hours, making the preparation time to delivery easy and much less stressful. The instructor guides are written in a way that is logical and makes the pre-workshop study time simple and less frustrating: No hunting for the right slides, no guessing what the instructional designer intended for each module!"

-James T. Puett, Manager, Leadership and Organizational Development, Healthways Human Resources

e-Learning - Skill Development for One or One Thousand

Developing e-learning can put an even bigger strain on your budget. You can save time and money by purchasing one or more of the RTL e-learning programs, which are available for select titles. Designed as self-study versions of the corresponding classroom programs, these are developed and offered in convenient PowerPoint format that allows you to easily customize the material to suit your training needs. Each e-Learning program has also been converted into a (non-customizable) SCORM compliant version for distribution to a Learning Management System. You can use the e-learning as standalone training, or as follow-up to the classroom experience.

¹Bryan Chapman, "How Long Does it Take to Create Learning?," Chapman Alliance, 2010,

http://www.slideshare.net/bchapman_utah/how-long-does-it-take-to-create-learning. Calculation of development hours assumes the design includes a lesson plan, workbooks, handouts, and a supporting PowerPoint slide deck.

Accelerated Learning – Accelerated Performance

The basis of development for new RTL titles is to tap into the most contemporary thinking and best practices on topics proven to positively influence individual and organizational performance. Our experienced instructional designers review dozens of articles, books, and conference papers to isolate the critical components of a particular skill set. Then they use their expertise to create an effective training and learning design that is structured to enhance the learner's skills and improve his or her performance. A common instructional approach used in the development of RTL content is the "4P" instructional model conceived by Dave Meier at the Center for Accelerated Learning:²

- 1. Prepare (the learner)
- 2. Present (the information)
- 3. Practice
- 4. Perform (provide job aids that help the learner transfer and reinforce the learning back on the job)

Customizable

Each RTL classroom title can be delivered or viewed without any modification. The open Word and PowerPoint formats, however, enable you to add your own unique elements and even change the entire look and feel of the content. Here are just a few ways you can customize the material:

- Add your organization's logo or brand.
- Place your own organization-specific content in the design.
- Change examples to fit your industry or work environment.
- Modify content to match company rules and procedures.
- Add, delete, or rearrange content to meet training time constraints.
- Change fonts, colors, and layout properties.

You can also combine more than one program into a longer training design, extract relevant sections and reuse them in other designs you have created, or use the general structure of one module to begin developing a completely new design. Whether you choose to use the material as designed or modify it to suit your needs, you'll find the RTL to be a flexible resource and a wise investment.

License-Free

Buy once, use many times. It's a compelling model for any budget-challenged training department. Purchase any program from the library with the knowledge that you won't need to budget for any additional licensing fees or annual subscriptions. The material is yours to use in whatever way you choose.³ You can freely distribute the material throughout your organization, make it available on your internal server, create unlimited hard copies, upload it to a Learning Management System, develop a customized version, and even embed the material in other training or learning systems you design.

² http://www.altcenter.com.

³ Some restrictions apply. See www.HRDQstore.com/legal.html for more information.

Preparing for the Course

Before you conduct the training, we encourage you to read the Instructor Guide thoroughly, familiarize yourself with the program's components, and test-run the slideshow presentation. Please note that that diagrams, charts, and writing space have been decreased within the Instructor Guide to accommodate the width of the Instructor Notes column.

To conduct one of the activities in the course, you will need to find a recent article from a newspaper, news website or industry publication and make enough copies for each group in the activity to have one.

Make copies of the Learning Summary (one per participant) and distribute them at the beginning of the Review module. If you would like written feedback on the course, make copies of the Course Evaluation Form and distribute them at the end of the training.

Materials Included

This program contains several components:

- Instructor Guide
- Participant Guide
- Classroom Slideshow Presentation
- Learning Summary
- Course Overview
- Course Evaluation Form

Materials Not Included

You will need the following materials to conduct the course:

- Rulers and rubber bands (used in section 1.3, "Curiosity").
- Copies of a recent news article (used in section 3.4, "Evaluate").

If you choose to wrap up the program by asking participants to share key learning points, we recommend using a Koosh ball or beanbag for the activity (see Review, "Learning Summary").

Target Audience

This program is appropriate for business professionals at every level who want to perfect their critical thinking to problem solve quickly and make confident decisions.

Timing

The timing suggestions noted in this program assume that you have experience facilitating instructor-led training. If you are a new facilitator, you may wish to allow more time. Regardless of your experience level, you and your participants will gain the most from the program if you devote time beforehand to understanding the content.

Please consider rehearsing your delivery in order to gauge the pace of the program and determine whether you need to adjust the timing.

Please note: Only the pages highlighted below are those featured in this preview.

Table of Contents

Course Timing	vii
Icons Used in This Guide	vii
Overview	1
Course Objectives	2
Introduction	3
Module 1: Characteristics of Critical Thinking	4
1.1 What Is Critical Thinking?	
1.2 Why is it Important?	
1.3 Curiosity	7
1.4 Awareness	
1.5 Flexibility	
1.6 Common Sense	
Module 2: Critical Thinking Mistakes	
2.1 Rationalization	
2.2 Emotional Thinking	
2.3 Biases	
2.4 Tunnel Vision	
Module 3: The Critical Thinking Process	
3.1 EEE	
3.2 Examine	
3.3 Explore	
3.4 Evaluate	
Module 4: Turning Thinking into Action	25
4.1 Critical Thinking Practice	26
4.2 Thinking about Critical Thinking	
Review	
Learning Summary	
Action Plan	
Test Your Knowledge	
Appendix	
References	
Suggested Resources	

Overview

Objectives

- Explore what you will gain by completing the course.
- Develop a basic understanding of why this topic matters.

Type of Activity	Section	Time (minutes)
0	Course Objectives	5
0	Introduction	5
		Total: 10 minutes

Course Objectives

Successful completion of this course will increase your ability to:

- Define critical thinking. ٠
- Identify and adopt the characteristics of critical thinking.
- Recognize and avoid critical thinking mistakes. ٠
- Identify assumptions. ٠
- Evaluate information accurately and thoroughly. •
- Distinguish between fact and opinion.
- Implement the critical thinking process in business situations.





Introduce yourself and briefly describe your background.

Go over logistics (schedule, breaks, restrooms, etc.) and any ground rules for the day. Typical ground rules include showing respect for all participants, participating fully, not using electronics, and not interrupting or dominating the conversation.

Critical Thinking Skills	
Course Obj	ectives
 Define critic Identify and critical think 	adopt the characteristics of king. nd avoid critical thinking mistake
Critical Thirstong Skills	
Course Obj	ectives (cont.)
 Evaluate info thoroughly. 	rmation accurately and

- Distinguish between fact and opinior
- Implement the critical thinking process in business situatio

Review the course objectives.

Introduction

In today's fast-paced workplace, decisions often have to be made quickly, effectively and without doubt. It is increasingly important for employees to be able to think critically on their own. When employees excel at critical thinking, they can assess all possible approaches to a problem and choose the best solution confidently and calmly.

Executives repeatedly highlight critical thinking skills as a soughtafter trait in new hires and current employees. The AMA Critical Skills Survey asked 2,115 managers and executives to assess the importance of critical thinking skills. Seventy-two percent agreed that current employees' success is measured by their critical thinking skills. When asked if their organizations make an effort to assess critical thinking when hiring new employees, seventysix percent said yes.ⁱ

This course will enable you to learn the components of critical thinking and avoid blocks to critical thinking. As a result, you'll be able to think more creatively and independently, make better decisions by problem solving systematically, identify the value of ideas and reach well-reasoned conclusions.

Instructor Notes

5 minutes

Ask participants to read the Introduction, which provides an overview of why this topic matters and describes how the course will empower them as professionals.

Module 1: Characteristics of Critical Thinking

Objectives

- Explore the meaning of critical thinking and the benefits it offers.
- Learn how to develop an inquisitive attitude to help you gather and assess the right information.
- Discover your level of awareness and learn how you can use the Johari Window to learn what you do and don't know.
- Learn the traits of a flexible person and how to ensure you use common sense.

Type of Activity	Section	Time (minutes)
	1.1 What is Critical Thinking?	10
	1.2 Why is it Important?	5
	1.3 Curiosity	10
	1.4 Awareness	5
88	1.5 Flexibility	10
	1.6 Common Sense	10

Total: 50 minutes

1.2 Why is it Important?

How Critical Thinking Enables You

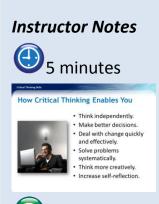
Critical thinking is a valuable skill in the workplace. It enables you to:

- Think independently.
- Make better decisions.
- Deal with change quickly and effectively.
- Solve problems systematically.
- Think more creatively.
- Increase self-reflection (and thus, be more receptive to selfimprovement).

Specific Benefits of Critical Thinking

- Detect inconsistencies and common mistakes in reasoning.
- Recognize your own assumptions and biases.
- Identify the importance and relevance of various ideas.
- Reach well-reasoned conclusions and solutions.

According to a study by The Conference Board, 400 senior HR professionals were asked to name the most important skill their employees will need in the next five years. Critical thinking ranked #1—above innovation or technology.



Review "How Critical Thinking Enables You."

1.6 Common Sense

Common sense helps you to spot a simple explanation for the situation or problem you have overlook, but it's not as easy (or as common) as it sounds. Common sense is about:

- Verification and accuracy. For example, considering whether numerical figures are accurate.
- Paying attention to the obvious. Ask yourself, does it pass the "sniff test"? Think of outlandish urban legends, like stories of people who follow their GPS when it tells them to drive into a building!
- Considering the source.

Individual Activity: Common Sense Quiz

Instructions: Test your common sense by answering the following questions.

- 1. How many birthdays does the average man have?
- 2. You have two US coins totaling 55 cents. One is not a nickel. What are the coins?
- 3. If there are 3 apples and you take away two, how many do you have?
- 4. Divide 30 by 1/2 and add 10. What is the answer?
- 5. Two men play five games of checkers. Each man wins the same number of games. There are no ties. Explain this.
- 6. If you had only one match and you walked into a room where there was an oil burner, a kerosene lamp, and a wood-burning stove, what would you light first?
- 7. A farmer has 17 sheep; all but 9 die. How many are left?
- 8. Is it legal for a man in California to marry his widow's sister? Why?



Review the opening sentence. Provide the following example and then continue by reviewing the bullet points.

Example: A resident doctor was making the rounds and saw a patient with a black tongue. She immediately ran through all possible diagnoses with that symptom. Meanwhile, the attending doctor asked the patient if he used black cough drops—he had. Lesson: Pay attention to the obvious.

Review the instructions. Allow participants time to respond individually.

Debrief by reviewing the answers:

1. One

2. A 50 cent piece and a nickel. Only one is not a nickel.

- 3. Two
- 4.70

5. They were playing different people

- 6. The match
- 7. Nine
- 8. No. He's dead.

2.2 Emotional Thinking

Another critical thinking mistake is emotional thinking. This is not the same thing as intuition. Intuition has a place in critical thinking, which we'll look at later in the program. We're using the term "emotional thinking" to mean the absence of logic.

Emotional thinking occurs when:

- Reacting to a feeling
- Reacting to emotional language
 - Example: "Public employee" vs. "Bureaucrat"
- Engaging in wishful thinking: An unrealistic belief in something you wish were true. Example: Think of products people use to try to lose weight or cure an illness.
- Engaging in polarization: An emotional attachment to one side of an issue. Examples:
 - Trusting evidence for your belief/position without questioning it
 - Rejecting evidence for other beliefs/positions without examining it
 - Thinking: Good ("us") versus bad ("them")

How to Avoid this Critical Thinking Mistake

- Separate facts from feelings.
- Focus on developing flexibility.
- Carefully follow the critical thinking process until it becomes second nature.

Group Activity: Practice Combatting Emotional Thinking

Instructions: Work with a partner or small group. Read the sentence below and rewrite it to eliminate any emotional or polarizing language.

The new manager's leadership is disastrous; she intends to dismantle a perfectly good system just so she can cling to her familiar way of doing things.

10 minutes notional Language Neutral Term Emotionally Loaded Ter Public employee Bureaucrat • House • Home Tax reduction • Tax relief • Plant • Weed Medical procedure Life-saving surgery • Flee Evacuate Disturbance · Riot

Instructor Notes

Review the opening paragraph and bullet points. Explain that polarization often occurs when someone we trust persuades us that a particular belief is good, and is threatened by opponents. We are afraid to question the belief/position because that would look like we are siding with the "enemy." So we become ingrained in our position and eventually refuse to consider the possibility that anything about the opposing belief/position could be valid.

Review "How to Avoid this Critical Thinking Mistake."

Review the instructions. Allow participants time to respond with their partner or small group.

Answers should focus on replacing the following emotional words:

Disastrous, dismantle, good, and cling.

Here is one possible sentence rewrite:

The new manager's leadership is uninspiring; she intends to rework a system to make it more familiar to her.

3.3 Explore

The second step in the critical thinking process is to explore. Once you collect your information, you must make sense of it.

Interpret Information

- Separate fact from opinion: Look or ask for the evidence to back up the information. Facts are concrete and can be documented.
- Clarify ambiguous words, phrases, examples, or statistics. Ask the source "What do you mean by that?" if possible, or substitute an alternative meaning for the ambiguous item and see if it changes your interpretation. Example: "Produced excellent results." What does "excellent" mean? What "results" were produced?
- Clarify numbers that are too big or too small to relate to or picture. These can cause us to distort our perspective and affect our analysis.
- Recognize euphemisms; they are designed to sound harmless and may cause us to overlook critical information.

Examples:

- "Profit-taking" = selling or cutting losses
- "Downsizing," "rightsizing," "RIF" (reduction in force), "reorganizing" = cutting jobs, layoffs, or if you want to call it what it is, firing people.

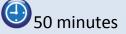
- "Categorical inaccuracy" = lie
- "Asset" or "resource" = people

Individual Activity: Fact vs. Opinion

Instructions: Complete each sentence below.

- 1. Babies are _____
- 2. Elderly people are ______
- 3. My neighbors are _____
- 4. Girl Scouts are _____
- 5. CEOs are ______
- 6. Customers are _____

Instructor Notes



Review the opening sentence and the first bullet of "Interpret Information."

Fac	t or Opinion?
2.	Police arrested three burglars last night. He has the most clout in the organization. She said the CEO was the smartest business person she had ever known.

Ask participants to determine whether the statements on this slide are fact or opinion. Answers:

1. Opinion: suspects are not burglars until they are convicted. It would be fact to say "Police arrested three people last night."

2. Opinion: "The most clout" is a relative term.

3. Fact: The fact is that she made this statement, not that the CEO is the smartest business person.



Review the remaining bullets under "Interpret Information."

Review the instructions. Allow participants time to respond. Then, ask them to review their work – deciding which statements are fact or opinion. Next, have them switch workbooks with a partner. Ask them to determine if they agree or disagree and to identify any ambiguous words or euphemisms that color the meaning.

4.2 Thinking about Critical Thinking

Use this tool to evaluate the critical thinking process for the scenario.

Instructions: Reviewing the behavior and conversations you observed while completing the practice activity, choose the response that most accurately reflects the performance of the group.

Accurately and thoroughly EXAMINES the issue or problem			
1 Unskilled No in-depth look at the issue, no attempt to gather data or evidence outside of personal knowledge and	2 Developing Gathers data and evidence but doesn't verify its accuracy, limits data gathering to familiar sources.	3 Proficient Makes first-hand observations when possible, gathers data and evidence from a variety of sources and verifies	
perspective.	Turminar Sources.	its accuracy.	

Comm

omments:				
Accurately and thoroughly IDENTIFIES the issu	Je	or pr	oblen	n

1 Unskilled Fails to identify and/or summarize the problem or issue in any detail.	2 Developing Summarizes the issue, though some aspects are incorrect or mixed up. Key details are superficially covered or missing entirely.	3 Proficient Clearly and completely summarizes the issue, including all relevant aspects of the issue, even if seemingly small.
Comments:		

Instructor Notes

10 minutes

Review the opening sentence and instructions. Tell the observer of each group that they are primarily responsible for completing the form; however, all members of each group should think about each of the benchmarks and should feel free to add their own comments.

Encourage participants to use this tool for situations requiring critical thinking back on their jobs.

(continued on the next page)

Accurately and thoroughly identifies the ASSUMPTIONS and BIASES			
1 Unskilled Approach to the issue or problem is one-dimensional, doesn't recognize assumptions or biases.	2 Developing Recognizes some assumptions and biases, and attempts to account for them in the analysis of the issue or problem.	3 Proficient Clearly identifies assumptions and biases. Delves into the assumptions to separate valid from invalid.	
Comments:			

Instructor Notes (cont.)

(continued on the next page)

Accurately and thoroughly EXPLORES the issue or problem			
1 Unskilled Accepts evidence and statistics at face value, makes no attempt to separate facts from opinions.	2 Developing Analyzes and verifies the evidence, uses objective questioning to separate facts from opinions.	3 Proficient Challenges the evidence to verify its accuracy, actively looks for fallacies in reasoning or for information that may have been omitted that may be relevant to the issue.	
Comments:			

Test Your Knowledge

- 1. Write a definition of critical thinking.
- 2. List three benefits of critical thinking.
- 3. Which of the following is NOT a characteristic of critical thinking?
 - a. Curiosity
 - b. Awareness
 - c. Standing your ground
 - d. Common sense
- 4. Which of the following describes rationalization?
 - a. Evidence \rightarrow Conclusion = Rationalization
 - b. Conclusion \rightarrow Evidence = Rationalization
- 5. What of the following is NOT an example of emotional thinking?
 - a. Checking your intuition
 - b. Reacting to loaded language
 - c. Polarization
 - d. Wishful thinking

Instructor Notes



As a final activity, allow participants 5 minutes to complete the "Test Your Knowledge" quiz individually.

Debrief by reviewing the answers as a class (see Answer Key below and on the next page).

Answer Key

1. Critical thinking is reasonable, reflective thinking that is focused on deciding what to believe and what to do. It uses the identification and evaluation of evidence to guide decision making.

2. Think independently, make better decisions, solve problems systematically, think more creatively, increase selfreflection.

- 3. c
- 4. b
- 5. a

(continued on the next page)

What our Clients Say about the Reproducible Training Library

I have used many of the HRDQ *Reproducible Training* programs and I can't say enough good things about them. The content is easy to tailor—I've even combined programs to meet my clients' specific needs. Not only am I able to provide my clients with a professionally developed, customized program at a reasonable price, but I've saved myself a lot of time and frustration, too. I plan to buy more programs in the future. I highly recommend them!

Rosemary C. Rulka, MS, SPHR President R.C. Rulka Consulting, LLC

We chose the *Reproducible Training Library* for the open-source format and customizable materials. The programs are well structured and rich with content. Preparation to delivery was less than 2 hours, and the addition of our company themes make the materials look like they were designed in house.

James T. Puett Manager, Leadership and Organizational Development Healthways Human Resources

Delivering high-quality, customized training has never been simpler.

The HRDQ *Reproducible Training Library* is your comprehensive source for soft-skills content that's downloadable, customizable, reproducible, and affordable. From communication and leadership to team building, negotiating, and more, our experts have done the development work for you. Whether you use the materials "right out of the box" or tailor the content to your needs—download to delivery takes just a few clicks.

Features and Benefits

- Instant Access: Your program is available to you for immediate download.
- Quality Content: Top-notch development enables you to deliver a rich program.
- Ability to Customize: Make the program yours, or use it "right out of the box."
- Unlimited Use: Reprint the materials as much as you like, as often as you like.

Get Started Today!

Click here to see a full list of titles.

Have questions?

Contact our Client Services Team at 800-633-4533 or info@hrdq.com.

