



Critical Thinking at Work: Evaluating Evidence, Tracing Causes and Recommending Sound Choices



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Introduction:

Many workplace decisions rest on untested assumptions, selective data and arguments that nobody examines, so teams fix symptoms, repeat errors and reopen choices already made. This Core Concept course builds practical critical thinking, problem solving and decision making skills for managers and professionals: questioning claims, weighing evidence, defining problems, tracing causes, comparing options and reaching sound group decisions. Participants apply each method to case files from several sectors and produce a Reasoned Recommendation Paper for a live problem from their own work, setting out the evidence, options and proposed course.

Course Objectives:

- Apply the Paul-Elder elements of thought and the RED model to question the reasoning behind workplace requests, reports and proposals
- Evaluate arguments and evidence using the Toulmin model, argument maps, source credibility checks and common fallacy tests
- Define workplace problems precisely and trace their causes with problem statements, issue trees, 5 Whys and fishbone diagrams
- Compare alternative options with a weighted decision matrix, risk-benefit tables and a pre-mortem before recommending one
- Run structured group decisions using the Nominal Group Technique and agreed consensus rules while limiting bias
- Write and defend a Reasoned Recommendation Paper that sets out the problem, evidence, options and proposed course

Target Audience:

- Managers who investigate recurring operational problems and decide on corrective options
 - Team leaders who weigh competing requests and recommend a course of action to their managers
 - Analysts and specialists who prepare evidence and options for management decisions
 - Project and programme managers who resolve issues and trade-offs during delivery
 - Policy, planning and quality officers who review proposals and challenge their assumptions
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Course Outline:

Day 1: Critical Thinking Foundations and Workplace Reasoning

- Paul-Elder Elements of Thought and Intellectual Standards
- RED Model: Recognise Assumptions, Evaluate Arguments, Draw Conclusions
- System 1 and System 2 Thinking in Daily Work Judgements
- Cognitive Bias Catalogue: Availability, Framing and Overconfidence
- Socratic Questioning Techniques for Clarifying Claims

Day 2: Evaluating Arguments and Evidence

- Toulmin Argument Model: Claim, Grounds, Warrant and Rebuttal
- Argument Mapping of Reports, Proposals and Emails
- Source Credibility Checks: Authority, Currency, Bias and Corroboration
- Reading Workplace Data: Correlation, Sample Size and Base Rates
- Logical Fallacy Spotting: Straw Man, False Dilemma and Hasty Generalisation

Day 3: Defining Problems and Testing Causes

- Problem Statement Canvas: Gap, Impact, Scope and Owner
- Issue Trees and Hypothesis-Led Problem Breakdown
- 5 Whys Questioning with Evidence Tests at Each Step
- Fishbone Cause Mapping Across People, Process, Tools and Environment
- Cause Hypothesis Testing Against Available Records

Day 4: Options, Decision Methods and Group Judgement

- Option Generation with Assumption Reversal and Analogy Prompts
- Weighted Decision Matrix Construction and Sensitivity Check
- Risk-Benefit Consequence Tables for Shortlisted Options
- Pre-Mortem Review of the Preferred Option
- Nominal Group Technique, Delphi Rounds and Consensus Rules

Day 5: Case Work and the Reasoned Recommendation Paper

- Operations Case File: Rising Rework and Missed Service Levels
 - Public Service Case File: Conflicting Data on a Policy Change
 - Recommendation Paper Structure: Question, Evidence, Options and Proposal
 - Reasoned Recommendation Paper Drafting for a Live Workplace Problem
 - Peer Critique Against Intellectual Standards and Recommendation Defence
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Skills You Will Gain:

- Argument Evaluation
- Evidence Appraisal
- Assumption Testing
- Problem Definition
- Cause Tracing
- Multi-Criteria Option Scoring
- Group Decision Facilitation
- Reasoned Written Recommendation

Why Attend This Course:

- Leave with a Reasoned Recommendation Paper for a real workplace problem, critiqued by peers against clear reasoning standards
- Spot weak evidence, hidden assumptions and faulty logic in reports and proposals before they drive a decision
- Reduce time lost to fixing symptoms and reopening decisions that were agreed too quickly
- Compare reasoning practice with managers and analysts from other sectors and countries

Conclusion:

Sound decisions depend less on intuition than on the quality of the reasoning behind them. The course moves from the elements of critical thinking and the biases that distort judgement, through the evaluation of arguments and evidence, to problem definition, cause analysis, option comparison and group decision methods. The final day applies these tools to multi-sector case files and to a Reasoned Recommendation Paper that participants take back to their manager, together with a repeatable reasoning routine for the next problem or proposal they face.