

Critical and analytical thinking (one day)

Critical and analytical thinking underlies the basic elements of communication and decision making. Critical thinking is about self-understanding. The Decision Advancement program on which this course is based is grounded on a simple but powerful model of the way people think. Through multimedia presentation techniques, interactive exercises, small-group discussions, brain teasers, and optical illusions participants experience some of the quirks of thinking and the thinking traps that critical thinking programs are designed to address.

Creative, critical, vertical, and lateral thinking are useful labels when describing the outcomes of people's thinking processes. Of course there is really only one "thinking" that goes on in someone's head; the labels and this course are designed to help people understand and identify their thinking processes, strengths, and weaknesses. Since so much of the thinking process is automatic and an unconscious level (and not only has to be, but is the strength of human thinking) most people are unaware of the processes they use in order to reach a decision or communicate with someone else. All the tools taught in this course on critical and analytical thinking are designed to raise the awareness of participants thinking processes and to lower the probability that they will slip into a thinking trap.

As an example, when you first looked at this outline you instantly started to make judgements on it based on your conscious and unconscious expectations of look and content for an outline and a course. If you were not aware and didn't pay attention to your thinking process, the result would be that you would continue to choose (or not choose) courses substantially similar to approaches you had used in the past. If questioned, you might tell others that the one you prefer "sounds good" or "feels right" based on your experience. Yet without the critical and analytical thinking of your own thinking process (the skills participants learn and retain in this course) what you would be doing is trusting your intuition and unconsciously repeating past decisions.

Teaching critical and analytical thinking skills is different than most seminars. To be effective, the course must get people thinking about their thinking, both in the course and after. That is why our approach is experiential and interactive, and uses common work examples for participants - like the situation outlined in the previous paragraph. With a minute or two of reflection right now, you could identify some of the automatic assumptions and expectations that you have when you evaluate courses - your thinking "information filters" that make up a large part of what we often call intuition. These filters are based on your experience; are absolutely essential for you to carry out your work; produce the best solutions the majority of the time; but can limit the results you get. Someone who is aware they have these filters - assumptions, expectations, beliefs, biases - and examines and analyzes them while they are making decisions to see if they are resulting in the outcomes they desire is a critical and analytical thinker. Someone who doesn't will make decisions today that look like yesterday's decisions. In many cases that is

okay; but it may be limiting, and won't lead to improved decisions during a time of continuous change.

This course unifies the concepts of critical, vertical, lateral, and creative thinking through the use of the Decision Advancement model. The model is presented through the innovative use of colored filter glasses which illustrate how our brains "filter" information automatically and unconsciously. The validity of the model is illustrated through the use of optical illusions, brain teasers, and an exercise in which participants hear a story, make their own logical decisions, and then discuss why these logical decisions are all different. Past participants have told us they use the model and the ideas of filters long after the course is over.

As the core of this course has been presented as a keynote speech opening or closing conferences, the overriding goal is engagement of participants. As a colleague has said, "sleeping people learn nothing." The core material and "model of thinking" used in this course have been presented to thousands of people in Canada, the United States, and as far away as Turkey. (Please see the bio below for client comments.)

This material has been presented to all levels of organizations, from administrative and support staff to upper-level management. Many of these sessions have included all these different levels in one program; in fact, the learning is enhanced when there is a wide range of levels and experience in the room.

In addition to the key areas of self reflection and understanding of the thinking process, common tools that help improve analytical thinking skills such as mind mapping, SWOT analysis, and cause and effect diagrams will be covered. Common tools that help improve critical thinking skills such as brainstorming will also be detailed. As well, other lesser-known but useful tools will be presented, including the paired sort prioritizing tool (which can be used individually or in a group), concept mapping, and the Decision Advancement "think about it worksheet" which helps identify assumptions and create solutions when people are stuck on a problem.

Plenary and small group exercises help participants uncover situations when they do or don't use critical and analytical thinking. In addition to looking at where their thinking can be improved, there is a significant emphasis on identifying their current thinking strengths. Note that the pitfalls in human thinking that Critical and Analytical Thinking is designed to address are really the flip side of the strengths in human thinking. For example, relying on automatic "snap" decisions based on assumptions and experience works most of the time in most situations - it is why people practise a sport; so that the thinking becomes automatic. Simply asking people to "think differently" (in a critical and analytical manner) will be resisted on both a conscious and unconscious level unless it is acknowledged that automatic, unconscious thinking is overall a net benefit. Moreover the framing of thinking this way opens people to taking a look at their own (mostly beneficial) experience, assumptions, and beliefs such that they learn to identify situations when the automatic, unconscious thinking. Of course, even the action of self understanding is

carried out through the same thinking filters, which is why the course design and format is so critical to long term impact.

In this course, participants learn the components of critical and analytical thinking but in a much more dynamic, impactful, and memorable way than happens if they were simply listed as bullet points on PowerPoint slides. Participants work through examples from their own work situations to examine their thinking. Receiving feedback from other participants not only leads to further insights, but increases skills in giving and receiving feedback.

Critical and Analytical Thinking is not a course where participants leave with pages of facts and figures. It is a leading edge course where participants explore their own thinking, decisions, and analysis through interactive, engaging exercises. That is why the course workbook has little traditional "content" in the form of facts, figures, and endless PowerPoint slides full of bullet points. With the exception of the Thinking Model (which is referred back to several times), worksheets, thinking tools, and some specific illustrative diagrams, few of the slides used are reproduced in the book. There are several reasons for this:

1. Many of the slides are advanced Flash animations, which would be pointless to print out (the core model and some exercises can be viewed on video at www.ThinkingforResults.com)
2. the purpose of the slides is not to convey information, but to trigger insights by participants, so the important things for participants to record are their own reactions and thoughts
3. Many of the slides rely on the participants' immediate reactions to the slides; to have them see the slides ahead of time would spoil the effects
4. By having participants write down the information which is important to them, the thoughts, reactions, and insights have to traverse their brain. Simply putting a list of facts or ideas in front of someone is no guarantee they will be processed, whereas having them reflect and record what is important to them increases retention
5. Finally, this is not a course full of facts and figures, which participants would need to refer to in the future. The value of the course comes from the self understanding, reflection, and insights they identify.

This self understanding is addressed several different ways from different directions in the course, both through experiential exercises and Socratic interaction. It is then always tied back to the core model of thinking and self understanding.

Participants are encouraged to make notes of the discoveries they make of their own thinking processes in a pocket sized "thinking journal". This has tips on using self analysis to identify aspects of their thinking that work for them and aspects that don't. It is a tool they can conveniently carry with them and continue to utilize.

Presenter Biography:

Randy Park is the author of the book "Thinking for Results-Success Strategies" and the upcoming book "The Prediction Trap: when smart people make bad decisions." With Bachelors and Masters degrees in Physics, he has presented training courses and speeches since 1986. After several years of development, in 2002 he launched Decision Advancement (initially called Thinking for Results) to help organizations improve decision making, problem solving, communications issues, and especially assumptions made (without critical thinking) when looking to the future. He is a frequent media commentator on these issues.

Randy brings to this course design the critical thinking reflected in his study of how people think and make decisions, and the analytical thinking reflected in his physics and mathematics training.

A dynamic presenter, Randy has used his years of teaching and facilitating experience along with above average technical knowledge to design dynamic presentations which are far above an average "seminar." Client comments say it best:

"A lot of people were talking about your session for days afterwards. We use your language in our everyday discussions now. My colleagues just incorporate it into what they are saying and thinking. We will be discussing something and then, up pops the word 'filter.' That kind of impact on your day-to-day vocabulary, thinking, and communications is pretty dramatic."

Sheena August, Provincial Education Coordinator, Saskatchewan Housing Corporation

"We have regularly been hearing the word 'filters' in conversations in and about the office. Your talk has definitely opened up the minds of many and has had a lasting effect."

Mel Bahrey, Sales Associate, Willer Engineering Ltd.

"Wow Randy - you are an outstanding speaker. You are very interactive with good personal examples and really hold the audience's attention. Your slides are terrific and I enjoyed the way that you encouraged the participants to apply the information to their own jobs or lives."

Lynne Sinclair, Director of Education, Toronto Rehabilitation Institute