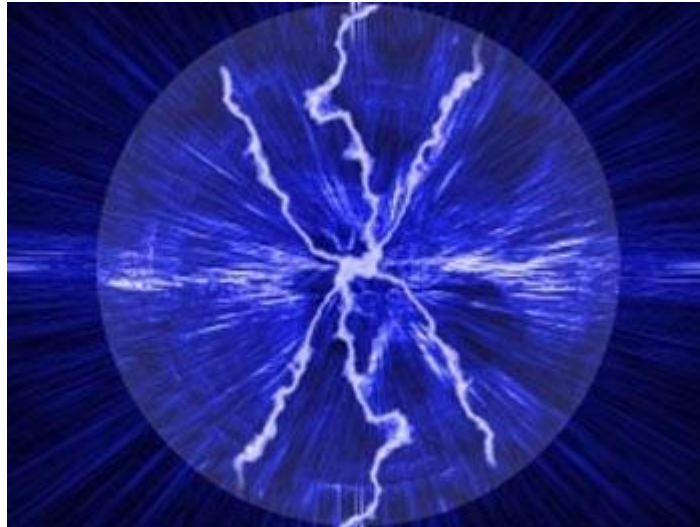


Sixteen habits of mind

Strategies for making intelligent decisions

By Christine Leonardi

By asking “What is the most intelligent thing we can do right now?” business teams learn to employ one of sixteen habits of mind to handle challenging scenarios intelligently and powerfully. Such results require teams to skilfully combine multiple talents, attitudes, cues, past experiences and behavioural predispositions.



This is according to the authors of [Habits of Mind: A Developmental Series](#), Arthur L. Costa and Bena Kallick, who identified sixteen types of intelligent behaviour, which they call “habits of mind,” based on how intelligent people behave when they are confronted with problems for which they don’t immediately have answers.

Costa and Kallick say intelligent people use strategic intellectual resources to make disciplined decisions.

“When humans experience dichotomies, are confused by dilemmas or come face-to-face with uncertainties, the most effective actions require drawing forth certain patterns of intellectual behaviour.” This suggests that intelligent people reflect on and evaluate the effects of their behaviour, which they modify and carry forth to future situations.

“People value certain patterns of thinking over others,” say Costa and Kallick. This implies that behaviour is deliberate and that people are sensitive to the contextual cues that signal it appropriate to employ a particular pattern of thinking.

According to Costa and Kallick habits of mind require drawing forth certain patterns of intellectual behaviour that produce powerful results. They are a composite of many skills, attitudes and preferences, including:

- Value - choosing to employ a pattern of intellectual behaviour over other, less productive patterns
- Inclination - feeling predisposed toward employing a pattern of intellectual behaviour
- Sensitivity - perceiving opportunities for and evaluating the appropriateness of employing a pattern of behaviour

- Capability - possessing the basic skills and capacities to action the behaviour
- Commitment - constantly reflecting on and striving to improve one's performance in using a pattern of intellectual behaviour.

Intelligent people's 16 habits of mind

Costa and Kallick outline 16 habits of mind, which describe some of the things intelligent people do when they are confronted with challenges they cannot immediately solve:

“ Interestingly, a habit of mind is seldom performed in isolation. Instead, people commonly draw forth and employ clusters of behaviours in different situations. For example, when people listen intently, they employ flexibility, meta-cognition, precise language and sometimes questioning. ”

1. Persist

Intelligent people:

- stick to a task until it is completed
- don't give up easily
- are able to analyse a problem, to develop a system, structure or strategy to attack it with
- employ a repertoire of alternative strategies for problem solving
- collect evidence to prove their problem-solving strategy is working; and if it doesn't, they know how to back up and try another tactic
- know when to reject a theory or idea
- have systematic methods of analysing problems, including knowing how to begin, what steps must be performed and what data to generate or collect
- are able to sustain a problem solving process over time
- are comfortable with ambiguous situations.

2. Manage impulsivity

Intelligent people:

- have a sense of deliberativeness
- think before they act
- intentionally form a vision of a product, plan of action, goal or a destination before they start
- strive to clarify and understand directions, develop strategies and don't make immediate value judgments about ideas before fully understanding them
- reflect on, and consider alternatives, as well as the consequences of several possible outcomes, before taking action
- decrease their need for trial and error by gathering information
- take the time to reflect, before answering
- make sure they understand instructions and listen to alternative point of views.

3. Listen to others with understanding and empathy

Highly effective problem solvers spend an inordinate amount of time and energy listening. Some psychologists believe that the ability to listen to another person, to empathise with them and to understand their point of view, is one of the highest forms of intelligent behaviour.

Being able to paraphrase another person's ideas, detecting indicators (cues) of their feelings or emotional states in their oral and body language (empathy), accurately expressing another person's concepts, emotions and problems—are all listening behaviours.

Intelligent people:

- are able to see through the diverse perspectives of others
- gently attend to other people
- demonstrate their empathy for and understanding of a concept or feeling by accurately paraphrasing, building on, clarifying or giving an example of the idea.

World-renowned author and business school professor Peter Senge believes that to listen fully, one needs to pay close attention to what is being said beneath the words.

The complex skill of developing deeper silences in yourself in order to slow your mind's hearing to your ears' natural speed and hear the meaning beneath the words, is called generative listening.

It requires one to monitor one's own thoughts while attending to the other person's words. Good listeners, especially when they strongly disagree with others' point of views, first try to understand what the other person is saying. They want to know exactly what they are disagreeing with.

4. Think flexibly

The highly flexible human brain has the ability to "rewire", change and even repair itself to become smarter.

Flexibility is the cradle of humour, creativity and repertoire. Flexibility of mind is essential for working with social diversity. It enables an individual to recognise the wholeness and distinctness of other people's ways of experiencing and assigning meaning to reality.

Flexible people have the most control. They:

- have the capacity to change their minds as they receive additional data
- engage in multiple and simultaneous outcomes and activities
- draw upon a repertoire of problem solving strategies
- practice style flexibility, knowing when it is appropriate to be broad and global in their thinking and when a situation requires detailed precision
- create and seek novel approaches
- have well-developed senses of humour
- envision a range of consequences
- think laterally, which means they approach problems from new angles, using novel approaches
- consider alternative points of view and deal with several sources of information simultaneously
- are open-minded about change driven by additional information, opposing views and contradicting beliefs

- know that they have and can develop options and alternatives
- understand mean-ends relationships
- are able to work within rules, criteria and regulations and can predict the consequences of breaking them
- have confidence in their intuition
- tolerate confusion and ambiguity up to a point
- are willing to let go of a problem, trusting their subconscious to creatively and productively continue working on it.

Flexible thinkers have the ability to wilfully shift between multiple perceptual positions, including:

- *Ego-centrist* – which involves perceiving something from your own point of view
- *Allo-centrist* – which involves perceiving something from another person's perspective
People operate from this position when they empathise with other's feelings, predict how others think, and anticipate potential misunderstandings.
- *Macro-centrist* – which is similar to looking down from a balcony at yourself and your interactions with others
This bird's-eye view is useful for discerning themes and patterns from a diverse range of information. It is intuitive, holistic and conceptual. Since we often need to solve problems with incomplete information, we need the capacity to perceive general patterns and jump across gaps of incomplete knowledge or when some of the pieces are missing.
- *Micro-centrist* – which examines the individual and sometimes minute parts that make up the whole
This "worm's-eye view" involves logical, analytical computation searches for causality in methodical steps. Without it, science, technology and other complex enterprises won't function. It requires attention to detail, precision and orderly progressions.

5. Think about their thinking (meta-cognition)

Intelligent people plan for, reflect on, and evaluate the quality of their own thinking skills and strategies.

Meta-cognition is our ability to know what we know and what we don't know. It involves:

- an increased awareness of one's actions and the effect of those actions on others and on the environment
- forming internal questions as one searches for information and meaning
- developing mental maps or plans of action, mentally rehearsing prior to performance, monitoring those plans as they are employed and being conscious of a need for a midcourse correction if the plan isn't working, reflecting on the plan upon completion for the purpose of self-evaluation and editing mental pictures for improved performance.

6. Strive for accuracy and precision

The stamina, grace and elegance of a ballerina exemplify the desire to produce exceptional results through craftsmanship, mastery, flawlessness and economy of

energy.

People who value accuracy, precision and craftsmanship take time to check their work. They review the rules by which they abide; the models and visions they follow; the criteria they are required to employ; and confirm that their finished product matches the criteria.

For some, craftsmanship is about exactness, precision, accuracy, correctness, faithfulness and fidelity. For others, it involves continuous reworking. For example, Mario Cuomo, a great speechwriter and politician, said his speeches were never done. Deadlines were the only things that made him stop working on them.

To be a craftsman means:

- knowing that one can continually perfect one's craft by working to attain the highest possible standards
- pursuing ongoing learning to be able to sharply focus one's energy on completing a task
- taking pride in one's work and value accuracy
- taking the time to check one's work.

7. Question and pose problems

Effective problem solvers:

- know how to ask questions to fill in the gaps between what they know and what they don't know.
- recognise discrepancies and phenomena in their environment and probe into their causes.
- are inclined to pose questions about data that supports others' conclusions and assumptions:
 - What evidence do you have
 - How do you know that it is true
 - How reliable is this data source?
- are inclined to pose questions about alternative points of view:
 - From whose viewpoint are we seeing, reading or hearing?
 - From what angle, what perspective are we viewing this situation?
- They are inclined to pose questions to identify causal connections and relationships:
 - How are these people (events) (situations) related to each other?
 - What produced this connection?
- are inclined to pose hypothetical, "iffy"-type questions:
 - What do you think would happen if.....?
 - If it is true, what might happen if....?

8. Apply past knowledge to new situations

Intelligent human beings:

- learn from experience
- often draw forth experience from their past when confronted with new and perplexing problems
- often say, "This reminds me of...." or "This is just like the time when I..."
- explain what they are doing in terms of analogies or references to previous experiences
- call upon their store of knowledge and experience as sources of data to support, theories to explain or processes to solve each new challenge

- are able to abstract meaning from one experience, carry it forth and apply it in novel ways in new situations.

9. Think and communicate clearly and precisely

Language and thinking are inseparable. Fuzzy language is a reflection of fuzzy thinking. Language refinement plays a critical role in enhancing a person's cognitive maps and their ability to think critically.

Intelligent people strive to communicate accurately in both written and oral form, by using precise language, defined terms, correct names, and universal labels and analogies. They steer clear of generalisations and distortions. Instead, they support their statements with explanations, comparisons, quantification and other evidence.

10. Gather data through all senses

Intelligent people know that all information gets into the brain through the sensory pathways: gustatory, olfactory, tactile, kinaesthetic, auditory and visual. Most linguistic, cultural, and physical learning is derived from the environment by observing or taking in information through the senses.

“ To know a wine it must be drunk; to know a role it must be acted; to know a game it must be played; to know a dance it must be moved; to know a goal it must be envisaged. ”

Those with open, alert and acute sensory pathways, absorb more information from the environment than those whose pathways are withered, immune and oblivious to sensory stimuli.

10. Create, imagine and innovate

All people have the capacity to generate novel, original, clever or ingenious products, solutions and techniques. However, this capacity needs to be developed.

Creative thinkers conceive problem solutions differently. They:

- examine alternative possibilities from many angles
- tend to project themselves into different roles by imagining they are the objects being considered
- take risks and frequently push the boundaries of perceived limitations
- are intrinsically, as opposed to extrinsically, motivated
- work on the tasks because of the artistic challenge, not the material rewards
- are open to criticism
- hold up their products for others to judge and seek feedback to refine their techniques
- challenge the status quo
- constantly strive for greater fluency, elaboration, novelty, parsimony, simplicity, craftsmanship, perfection, beauty, harmony and balance.

11. Respond in wonder and awe

Intelligent people:

- are creative thinkers, who are passionate about what they do
- have an "I can" attitude together with an "I ENJOY" feeling
- delight in finding problems to solve themselves or propose to others
- enjoy figuring things out by themselves
- continue learning throughout their lives.

12. Take responsible risks

Intelligent people seem to have an almost uncontrollable urge to go beyond established limits. They:

- are uneasy about comfort; living on the edge of their competence
- seem compelled to place themselves in situations where they do not know what the outcome will be
- accept confusion, uncertainty, and the higher risks of failure as part of the normal process
- learn to view setbacks as interesting, challenging and growth producing
- don't behave impulsively
- take educated risks and know that not all risks are worth taking

It is only through repeated experiences that risk taking becomes educated. It often is a cross between intuition, drawing on past knowledge and developing a sense of meeting new challenges.

13. Find humour in everything

Intelligent people, who engage in the mystery of humour, have the ability to perceive situations from an original and often interesting viewpoint. They tend to initiate humour more often, place a greater value on having a sense of humour, appreciate and understand others' humour and are verbally playful when interacting with others.

Since they have a whimsical frame of mind, they thrive on finding incongruity and perceiving absurdities, ironies and satire as well as their ability to laugh at most situations and themselves.

14. Think interdependently

Nowadays, problem solving is so complex that one person can't go it alone. One person does not have access to all the data needed to make critical decisions and won't be able to consider as many alternatives as a group of people can.

Working in groups requires the ability to justify ideas and to test the feasibility of solution strategies on others. It also requires the development of a willingness and openness to accept feedback from a critical friend. Through this interaction, the group, as well as the individual members, continues to grow.

Thinking interdependently requires co-operative behaviours, like listening, consensus seeking, giving up an idea to work with someone else's, empathy, compassion, group leadership, knowing how to support group efforts and altruism.

15. Learn continuously

The humility of knowing that we don't know is considered the highest form of thinking. Intelligent people are in a continuous learning mode. Their confidence, combined with their inquisitive nature, allows them to constantly search for new and better ways.

Those who continuously learn always strive to improve, grow, learn, modify and improve themselves. They see problems, situations, tensions, conflicts and circumstances as valuable learning opportunities.

“The habits of mind transcend all subject matters commonly taught in school. They are characteristic of peak performers at home, school, athletic fields, organisations, the military, governments, churches and corporations. They are what make marriages successful, learning continual, workplaces productive and democracies enduring,” Costa and Kallick note.

“The goal of education should be to support others and ourselves in liberating, developing and habituating these habits of mind. Taken together, habits of mind direct us toward behaving authentically, congruently and ethically.”

Useful links:

- Do an honest [self-assessment](#) of how often you choose to behave intelligently.