Introduction

- Learning involves the discovery of relevance: “Part of learning to learn is learning the relevance of your strategies – their appropriate domain of application.”
- Learning tools are in the world as well as in the mind: “In all areas of life, people’s accomplishments are a joint function of their inner and outer resources.”

Problems, not Solutions

- There are many learning predicaments in which the search is not for a new way of solving problem as conceived, but for a new way of conceiving the problem.
- Professionals find themselves in the lowlands, in which the view is foggy, the ground boggy and the problem ill-defined.

Soft Thinking

- Limitation of language and logic.
- “… words are totally absent from my mind when I really think …”
- “thoughts die the moment they are embodied in words”
Insights, Hunches, and Complete Guesses

- First comes the insight, and then the figuring out: not the other way around.
- "... access to the workings of our own minds is increased when we are relaxed and 'not trying' ..."
- Backward masking is weakened when one does not try to identify the first stimulus (the masked stimulus).
- Guesses, even with low confidence, could be helpful.

Trying too Hard: How to Squash Creativity

- Makes us less sensitive to subtle sources of information.
- Makes us worry about appearance and performance, thus making us feel anxious and under pressure. Such pressure leads to self-consciousness, pressure, and a loss of expertise.
- Pressure pulls us back into hard thinking.
- It seems not to matter whether the feeling of effort is induced by a threat or a positive incentive: the effect on creativity can be just as bad.
- "... effort and pressure tend to narrow the focus of attention ...
- Make the search for a solution too intense, and you cannot afford to adopt this broader attitude.
- "It is by logic that we prove, but it is by intuition we discover."

Learning to Think Softly

- "... there is evidence that soft thinking can be regained and developed."
- "... cultivate states of mind that are relaxed and patient, yet quietly attentive and receptive to impressions, patterns and associations."
- "... just slow down."
- "... hold a problem in mind without actively, purposefully deliberating on it ...
- "... allow time at the front end of the learning process, before becoming focused on analysis, planning, and execution ...

The Conditions of Creativity: Boredom, Anxiety and Rotting Apples

- "The child who has learnt to play, and who has sufficient resources and sufficient space to be bored in ... has the unique opportunity to be bored in a productive way. Out of this boredom comes, eventually, play."
- Don’t make up your mind as quickly as possible – it results in behavioral rigidity.
- YC: don’t sit in front of your computer all the time (it provides constant stimulus, so you don’t get bored).
Listening to the Body: Learning to Focus

- Shift focus of attention from the head to the body.
- Feel of a gradually developing photographic print: an image slowly forming, not an argument being assembled or a story being told.
- “Whether to take a new job, get married, have children or accommodate an elderly parent: all such issues and decisions involve feelings, values and perceptions that are not easy to put into words, and time devoted to gently examining the non-verbal signals that attend them is time rationally spent.” (YC: A good advice in general.)

The Voices of Intuition

- Feelings, insights, images and dreams, guesses: inklings, fleeting thoughts that flash across the edge of consciousness and are often gone before we can get a good look at them.
- Hunches and promptings.
- Aesthetic sense: e.g., elegant proof.

The Resistance to Soft Thinking

- Too much emphasis on information, speed, logic, analysis. (YC: add performance, optimization, etc.)
- Intuition is disdained as lazy, sloppy, and primitive.
- We need to remind us of the resources of ingenuity that are available if we make time and space for them.

References