

The Creative Problem-Solver

To be a successful problem-solver requires that you learn to become four (4) different people and learn when to be each.

Explorer

The raw material of new ideas is information. Information comes from many sources. It includes:

- Facts
- Theories
- Concepts
- Rules
- Data
- Feelings
- Impressions

The Explorer is the side of you that seeks all of these.

Anyone can look for fashion in a boutique or history in a museum. The creative explorer looks for history in a hardware store and fashion in an airport. Robert Wieder, Journalist and Stand-up Comedian

Like a prospector looking for gold, the Explorer knows not to look in the same places where everyone else normally looks. Be curious. Ask questions. Look in strange places for answers to strange questions.

A problem well-stated is a problem half-solved. John Dewey, Philosopher

Know what you are looking for so you don't get bogged down with information overload. Arm the Explorer with a well defined problem.

Nothing is more dangerous than an idea when it is the only one you have. Emile Chartier, Philosopher

Find as many facts, theories, concepts, rules, data, feelings and impressions as you can. A professional photographer takes hundreds of photos to get a few good ones. (At a recent SuperBowl, *Sports Illustrated* photographers shot 250 36-shot rolls of film to get the 10-20 that ran in the magazine.) A good problem-solver should generate many ideas in hopes of finding one good solution.

Inventing is a skill that some people have and some people don't. But you can learn how to invent. You have to have the will not to jump at the first solution... because the really elegant solution might be right around the corner. The most likely inventor candidate would be someone who says, "Yes, that's one way to do it, but it doesn't seem to be an optimum solution." Then he keeps on thinking. Ray Dolby, Inventor

Look beyond the First Right Answer!

One thing can lead to something completely different

Shift your focus

Don't overlook the obvious

Pay attention to the small things

Look at the big picture

Slay a dragon

Use obstacles to break out of ruts

Find the ideas you already have

Write it Down!

People who are only good with hammers see every problem as a nail. Roger von Oech, Author

The Explorer starts the creative problem-solving process. To be effective, the Explorer must be courageous, flexible and open.

Artist

The Artist follows the Explorer, takes what the Explorer generated and manipulates the ideas.

The artist is not a different kind of person, but every person is a different kind of artist. Eric Gill, Philosopher

For the sound of a spaceship's high speed deceleration in the atmosphere of Jupiter, a sound designer on a science fiction movie tried a few varied ideas. Then, he set a piece of dry ice on a piece of sheet metal. He put a microphone nearby and heated the bottom side of the sheet metal with a blow torch. The quick melting of the dry ice gave the designer exactly the sound he was looking for.

The Artist's tools are in his or her mind:

Adapt-Change contexts

Imagine-Ask, "What if..."

Reverse-Look at it backwards

Connect-Join together

Compare-Make a metaphor

Eliminate-Break the rules

Parody-Fool around

Incubate-Do nothing

Creative Thinking may simply mean the realization that there's no particular virtue in doing things the way they have always been done. Roger von Oech

Every child is an artist. The problem is how to remain an artist after growing up.

Judge

The Judge takes over only after the Explorer and Artist are finished. The Judge evaluates the results.

Play is what I do for a living; the work comes in evaluating the results of the play. Mac MacDougall, Computer Architect

The Judge must evaluate based on criteria and not be skewed by wrong assumptions.

The human mind likes a strange idea as little as the body likes a strange protein and resists it with similar energy. W. I. Beveridge. Scientist

What's wrong with this idea?
What if it fails?
What assumptions am I making?
Are my assumptions current?
What's my cultural bias
What's clouding my thinking?
Bring in the fool!
Make the decision!

If you spend too much time warming up, you'll miss the race. If you don't warm up at all, you many not finish the race. Grand Heidrich, Runner

Warrior

No matter how hard the Explorer, Artist and Judge worked, if the solution isn't pursued, the idea is worthless.

Try? There is no try. There is only do or not do. Yoda in *The Empire Strikes Back*

Remember:

Change is inevitable
Everyone resists change

Therefore, the Warrior must:

Put together a plan
Put a fire in his or her belly
Put a lion in his or her heart
Get going
Get rid of excuses
Strengthen his or her shield
Sell, sell, sell
Be persistent.

Either you let your life slip away by not doing the things you want to do, or you get up and do them!