

## Step 4: Choosing the Best Solution

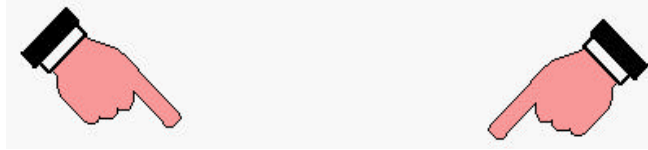
Since a decision is not required if there is only one alternative, at this point in your quest you should have generated several possibilities from which to choose.



### The Benefits of Making a Good Decision

Skillful decision making will result in a satisfying outcome. A skillful decision maker has more personal freedom because he/she is more likely to recognize, create, or discover new opportunities. The decision maker also has more control over his/her life since he/she can reduce uncertainty and limit the role of chance or of other people in determining his/her future.

Decisions are limited by what a person is capable of doing, by what a person is willing to do, and by the environment in which the decision is made. A lack of knowledge of personal values and a lack of decision-making skills can limit the decision-making process.



## Strategies for Decision Making

*" . . . to be able to choose the line of greatest advantage instead of yielding to the path of least resistance."*

George Bernard Shaw,  
*Man and Superman*

The following strategies are suggestions to consider. Some of the strategies are not necessarily good ones, but they are strategies sometimes used by students to solve problems. Consider each of these strategies and pick one or two that would work for you.

- Choose the action that could lead to the most desirable outcome, regardless of risk
- Avoid risking the worst; choose the action that will most likely eliminate the worst possible outcome.
- Take the best odds: choose the action that is most likely to bring success (has the highest probability of success).
- Get the best combination of low risk and desirable outcome; choose the action that has both high probability and high desirability.
- Base your decision on intuition; choose what "feels" right.
- Let others decide for you.
- Delay making a decision--maybe it will go away.
- In his book, *A Kick in the Seat of the Pants*, Roger von Oech defines four roles in problem solving: explorer, artist, judge, and warrior. By assuming each of the roles in turn, you may come to a satisfactory decision:

The Explorer has the curiosity and willingness to look for ideas in out-of-the-way places and apply principles learned from other seemingly unrelated topics.

The Artist takes this material and experiments with it in a variety of ways.

The Judge helps determine if an idea is any good--if it's what is wanted and needed.

The Warrior takes the offensive and devises strategies to overcome barriers to make the idea a reality.

- Edward de Bono's six modes of thinking describe how to approach a problem from different directions, or in de Bono's words, with different thinking hats. The six different thinking hats are given below.

White Hat thinking is concerned with gathering facts, figures, and objective information. It does not allow opinions to interfere with factual information.

Red Hat thinking recognizes that emotions and feelings influence thinking. The red hat thinker uses hunches and feelings to generate information.

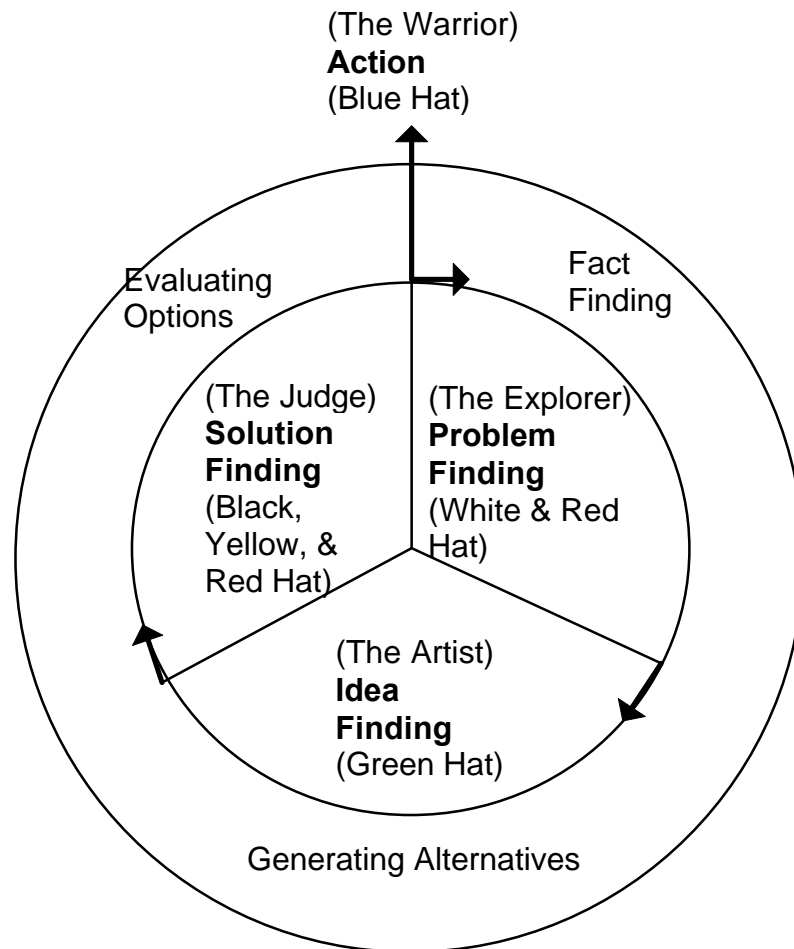
Green Hat thinking involves a form of lateral thinking that includes creativity. The colour green is selected because it represents nature and things that grow from seeds.

Black Hat thinkers must be logical when arguing against an idea. The black hat always has negative feedback, which is objective and free from emotions.

Yellow Hat thinkers are the opposite of black hat thinkers. They are also logical, but in a very positive, constructive way. The yellow hat is always looking for the positive outcome from every thought and activity.

The Blue Hat thinker organizes and controls the thinking of the other hats--leading them and marshalling them into action. The blue hat thinker is the one who makes things happen.

## Problem Solving with von Oech and de Bono



In order to use any of the above strategies, you must be able to evaluate each of the possible solutions you have generated. You will need to look at desires (what you want the outcome to be), along with demands (what you need the outcome to be), and the possibility of implementing the solution given the time, money, feasibility, acceptability, and usefulness of the outcome. Take into account your ability to perform whatever actions need to be accomplished and your willingness to do what needs to be done. You need to develop a list of criteria. These are the means by which you can assess or measure the appropriateness and usefulness of the various solutions.

Depending on the problem, your list of criteria will vary. Some very general, common criteria are listed below:

- **Cost**  
Depending on the circumstances and your budget, this may be one of the most important criteria on your list.
- **Time**  
You may have unlimited time or a very specific amount of time to complete your solution. How much time is involved in implementing each possible solution? Does it fit the criteria?
- **Feasibility**  
Is it possible? Can this solution be accomplished? Generating a list of "pie in the sky" possibilities may not be of much use to you.
- **Acceptability**  
Are you willing to accept this option, and does it fit your perception of how others might accept it? Generating a solution that your teacher or parents will not accept may be futile.
- **Usefulness**  
Will the solution be beneficial? Does it have value?

Keeping in mind the list of criteria you have developed, compare the possible solutions using the following form:

<b>Promising Possibility #1:</b> _____		
<b>Advantages:</b>	<b>Limitations:</b>	<b>Unique Aspects:</b>

<b>Promising Possibility #2:</b> _____		
<b>Advantages:</b>	<b>Limitations:</b>	<b>Unique Aspects:</b>

<b>Promising Possibility #3:</b> _____		
<b>Advantages:</b>	<b>Limitations:</b>	<b>Unique Aspects:</b>

It is to be hoped that by this stage you will have eliminated some possibilities and created a list of the most promising possible solutions.

Keep in mind when you are looking at the possible solutions that a negative approach may result in eliminating all of the possibilities. If your search focusses on a reason *not* to do something, you will end up doing nothing.

A more positive approach will help you to focus on the elements of every solution that has potential and may result in a combination of elements forming into a great solution.

Once you have narrowed down the list of possible solutions, you can try to select the best one using the "Comparison of Solutions Table." An example table is filled out below.

**COMPARISON OF SOLUTIONS Sample Table**

	B	C	D	E	F	G	H	I	SUM OF SCORES
A	A	C	A	E	A	G	H	A	A <u>4</u>
	B	B	B	B	B	G	H	B	B <u>5</u>
		C	D	E	F	C	H	C	C <u>3</u>
			D	D	D	G	H	D	D <u>4</u>
				E	F	E	H	I	E <u>3</u>
					F	F	H	F	F <u>4</u>
						G	H	I	G <u>3</u>
							H	H	H <u>8</u>
								I	I <u>2</u>

Here is how you use the table. Suppose you had nine possible solutions. Make a grid by writing solutions B to I across the top, and solutions A to I down along the diagonal. Compare the two solutions represented by the box formed at the intersection of the solution across the top and the solution on the diagonal. Decide which, in your opinion, is the better solution. Place the letter corresponding to the better solution in the box. Continue until all the boxes contain a letter.

Total the boxes selected for each option and record the number at the right (in the "Sum of Scores" column). The solution with the highest number may be the solution you are looking for.

Now use the following table to compare the solutions you have come up with for your particular problem.

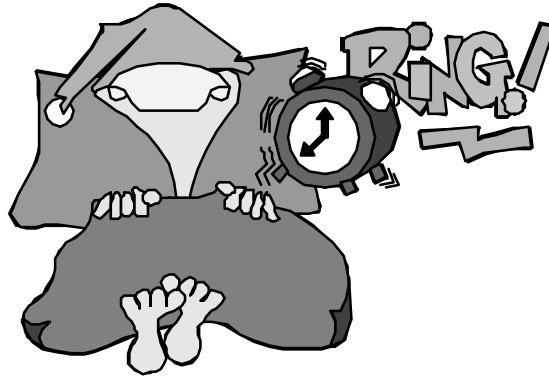
**COMPARING THE SOLUTIONS I HAVE COME UP WITH**

	B	C	D	E	F	G	H	I	SUM OF SCORES
A									A _____
B									B _____
C									C _____
D									D _____
E									E _____
F									F _____
G									G _____
H									H _____
I									I _____

It is possible that you may not be able to make a decision and feel stuck. If this is the case, try the following strategies:

- Put the problem out of your mind for a while. Relax, read, sleep on it. If this works, the solution should flash into your mind—you will have the "Aha!" experience. Putting the problem aside provides you with a rest from the problem and gives you a chance to incubate the problem in your mind.

- Dream about the problem. Dreaming produces some very creative, interesting solutions. Write down the dream immediately upon waking.



- Examine your decision-making style. Think about the way you make decisions. Three styles of decision making are described below. Can you recognize yourself in any of them?

### **The Cautious Style**

A person with the cautious style:

- \* prefers to make secure rather than novel choices
- \* produces as many options as possible and continually reviews them
- \* relies on reason and mistrusts feelings when making decisions
- \* believes there is just one right decision in a situation
- \* thinks about desired outcomes and tends to focus on personal losses
- \* is anxious about making choices
- \* may worry about the decision once he/she has made one or may want to change it

### **The Balanced Style**

A person with a balanced style:

- \* values making secure and novel choices equally (Sees value in both.)
- \* produces a number of options, but stops after a reasonable amount of search
- \* uses reason and feelings when deciding what to do
- \* believes there is no one right answer; works to find one that is good enough

- \* thinks about desired outcomes and considers both personal losses and gains
- \* feels both anxiety and excitement when making choices
- \* rallies behind the decision he/she has made and tries to learn from it

### **The Risky Style**

A person with a risky style:

- \* prefers to make novel rather than secure choices
- \* makes a quick overall survey of options and hopes something will click
- \* relies almost exclusively on feelings rather than reason when deciding
- \* tends to choose the first option that "feels right"
- \* assumes desired outcomes will occur and that personal gains will prevail
- \* feels mostly excitement about making choices
- \* takes action once decision is made without much additional thought

Follow your heart. That is, do what feels right for you. Using your intuition to examine how you feel about a particular solution or course of action often incorporates a tremendous amount of information about a situation. If a particular course of action does not feel right, then it probably isn't. Do not make decisions based on fear, however.

After all is said and done, there is one final decision to be made: **What should you do if your decision does not work out?**

Unexpected outcomes do happen. Events like freak accidents, severe weather, chance happenings, injuries, job loss, and sabotage can have an impact on your decision-making process.

Make sure you have an alternative solution, or be prepared to go through the process again. You may come up with an even better solution.