

Critical Thinking & Problem Solving

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A small, grey speaker icon with sound waves, positioned over the word "Berdiev" in the author's name.

4 Sure-Fire and Lifesaver Skills for Decision
Making

DECISION-MAKING...

While we start to learn how and practice decision-making skills as a child, the process of good decision-making becomes more important during adolescence and young adulthood. The decisions made as individuals get older may impact the rest of their lifetime. The consequences of bad decisions can adversely change the course of their life, or of their family's lives.



THE MORE IMPORTANT THE DECISION IS, THE MORE CRITICAL THE THINKING SKILLS MUST BE...

Determine the importance of a decision by the term of the consequences.

If the consequences of your decision are long-term, then spend more time on the process and follow each step of decision-making carefully.

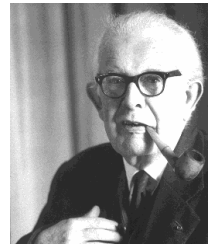


Breakfast menu decisions have short-term consequences.

The decisions regarding a teen pregnancy may have life-long consequences.



COGNITIVE THINKING STAGES...



Psychologist Jean Piaget, 1896-1980, divided cognitive thinking skills that include decision-making and problem-solving into 4 stages:

1. Sensorimotor – In this stage, infants and toddlers make decisions based on past experience and their senses (How does it taste, feel, look, sound, and smell? Did it work the last time work, or not?)
2. Preoperational – In this stage, preschoolers make decisions based on how it will affect *them*. They cannot imagine things they have not experienced. They cannot see another person's point of view.





3. Concrete Operational – The school-age child is now capable of logic. They are capable of thinking from different perspectives, but are limited by a lack of experience. Decisions are still based on what they have previously observed and experienced.



4. Formal Operational – The middle and high school child moves toward a more abstract type of thinking. This person does not have to experience something in order to understand it... they can imagine it. This type of thinking continues to develop into adulthood.

COGNITIVE THINKING STAGES...

Many psychologists added a 5th level of thinking, that develops during adulthood. The individual's life experiences influence this level of decision-making.



5. Post-formal thinking – adult thinking, is logical like formal operational thinking, but is more personal, integrative and practical, incorporating the individual's life experiences and commitment to the responsibilities of career & family. The logical decision is not always the best decision, when career or family is considered



GOOD DECISION-MAKING IS LEARNED...

To make good decisions, you must use good judgment. That means you must understand the possible consequences of your choice. It is a parent's job to use their judgment until you have proven that you have good judgment. You have to LEARN good decision-making skills.

This scenario creates a natural “struggle” between parent and child. The child struggles to make independent decisions, while the parent must exercise control while the child matures and as long as they are liable for the consequences of the decision.





**WE USE VALUES, GOALS, &
STANDARDS TO MAKE
DECISIONS**

What is a "value"?

A value is a **STRONG BELIEF**.

INTRINSIC, internal, or core values are personal qualities that we treasure.



EXTRINSIC or external values are things we consider worthwhile or give direction to our life.

Examples might include: Good health, popularity, good health, education, country/patriotism, friends, family, religion, money or the things money can buy.

Values are learned...

We learn values, usually from our parents. Sometimes our values are influenced by friends, teachers, coaches, advisors, religious leaders, grandparents, siblings, etc.

What are "goals"?

A goal is *some point you want to reach within your value system.*

There are 2 types of goals:

1. long term goals; they make take months or years to achieve
2. short term goals; they may be accomplished in hours or days



If your value is good health, can you name a short term goal? ...or a long term goal?



If your value is education, can you name a short term goal? ...or a long term goal?

To achieve goals, manage resources!

There are three **categories** of resources available to you to use in reaching your goals:

**HUMAN
RESOURCES**

(human qualities)

**MATERIAL
RESOURCES**

(things)

**COMMUNITY
RESOURCES**

(available to many people)



What type of resource is?...

**COMMUNICATION
SKILLS**

INTELLIGENCE

A COMPUTER

AN AIRPORT

ATHLETIC ABILITY

UNIVERSITY LIBRARY

COMMUNITY COLLEGE

**A PIANO
MONEY**

TIME

To achieve goals...

Do NOT procrastinate!

Procrastinate means to “put things off” until another time.

Procrastination stands in the way of reaching goals!!!!!!!!!!!!!!



To achieve goals...

Learn to set

priorities!

Homework late again? First things first young man!

List your goals in order of importance. This gives you a sense of direction and helps you manage your resources wisely.



Standards...

Standards are “limits or conditions or the manner” in which you go about reaching your goals.

When expressing standards verbally, you tend to use words like...

...only if

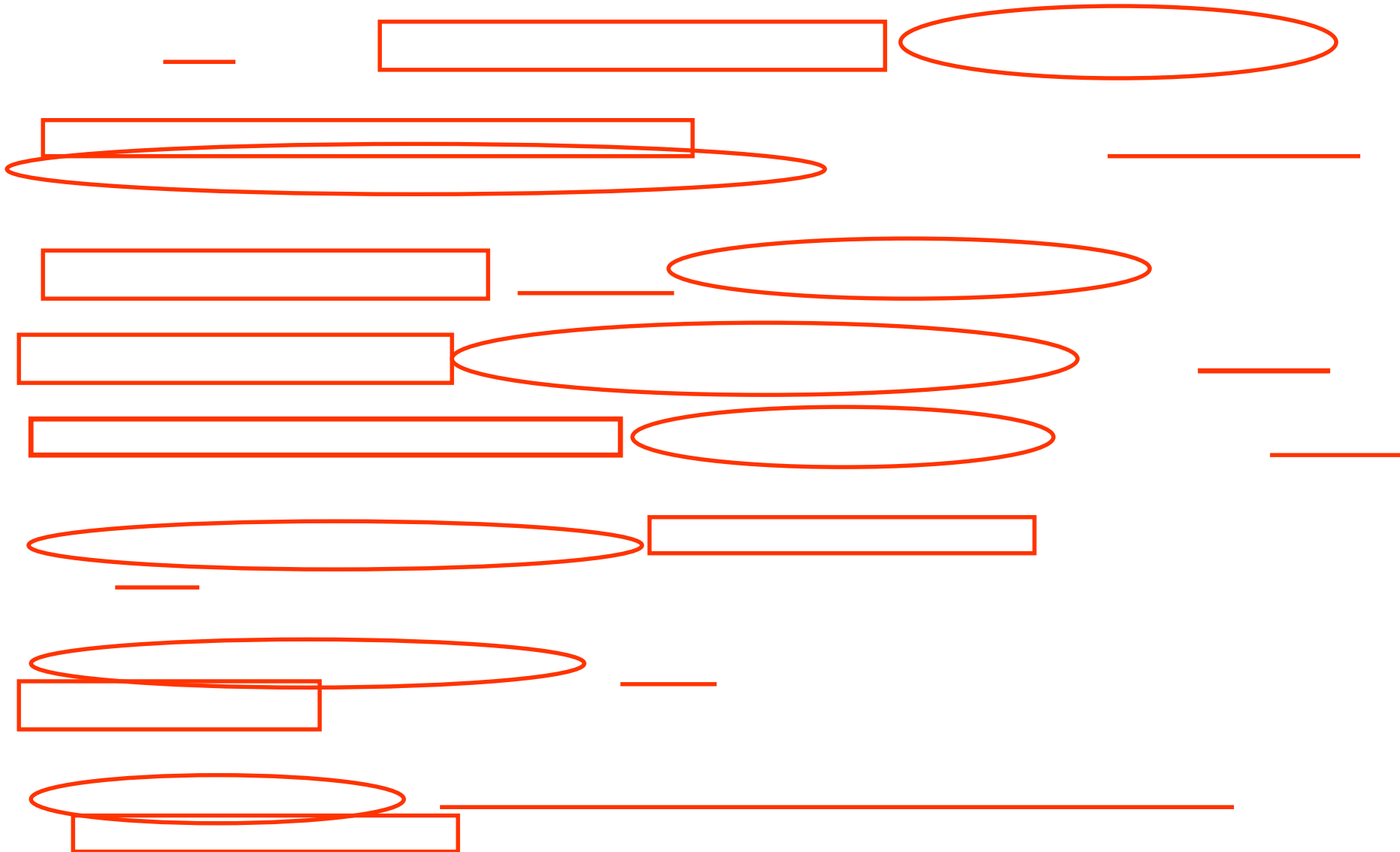
...as long as 

...even if

...no matter what



Can you identify the value, goal, and standard in these statements?



THE 4 FACTORS THAT INFLUENCE GOAL-SETTING INFLUENCE DECISION-MAKING...



1. Individual needs.

As Abraham Maslow theorized, human beings have basic needs. Physiological needs include food, shelter, air, clothing, etc. We need to feel safe and loved. We need to feel worthwhile. We need to feel like we're fulfilling our potential.

THE 4 FACTORS THAT INFLUENCE GOAL-SETTING INFLUENCE DECISION-MAKING...

2. Individual wants.



THE 4 FACTORS THAT INFLUENCE GOAL-SETTING INFLUENCE DECISION-MAKING...

3. Individual interests.



THE 4 FACTORS THAT INFLUENCE GOAL-SETTING INFLUENCE DECISION-MAKING...



4. Individual values.

SELF-CONCEPT INFLUENCES DECISIONS...



Low self-esteem, a negative self-concept, can cloud your judgment and lead to poor decisions. At those times, seek the advice or assistance of others.



Confidence, however, and a positive self-concept can be a foundation for good decision-making skills!

6 STEP DECISION-MAKING MODEL...

- 1. Identify the decision to be made**
- 2. Identify options/choices**
- 3. Research info on each option**
- 4. Make the decision**
- 5. Act on the decision**
- 6. Evaluate the decision**



HOW DO YOU IDENTIFY OPTIONS?

“To identify options” means to brainstorm all the different choices you have!



The individual who has not reached the stage of formal operational thinking may find it difficult to identify options that they haven't had personal experience with.



There are advantages of working in a group to make decisions, whether that is a group of 2 or 10. You might be able to identify more options than you could have discovered on your own.



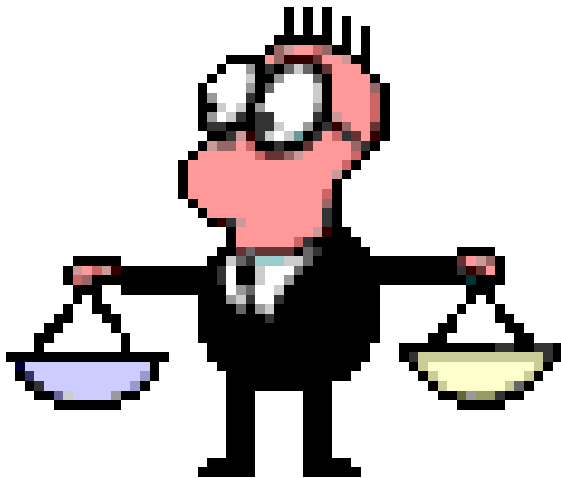
The disadvantage of working in a group to make decisions is that you may all have different opinions of what the right option will be.

HOW DO YOU RESEARCH EACH OPTION ?

To “research your options” means to list the pros and cons of each choice... the advantages and disadvantages. You will need to weigh the good things against the bad things of each choice!



Sometimes you simply need to gather more information before making a decision. Investigate. Explore. Ask advice.



MAKE THE DECISION, TAKE ACTION, AND THEN EVALUATE...



Again, don't procrastinate. Once you've narrowed your options down to the best one, take action.



After you've made your decision and taken action... evaluate that decision. Human beings learn from their mistakes.

- Excellent
- Very good
- Good
- Average
- Poor

The 6 Step Decision-Making Model...

1. Identify the decision to be made.

I'm driving.
Should I take
highway 5,
Interstate 94, or
just head off
cross country?



I'm going to the
big city. What
route should I
travel?

2. Identify options.

3. Research options

Highway 5 is shorter, but has potholes. The interstate is a good road, but the traffic is heavy and it's stressful. Cross country is scenic, but it's isolated and I might get lost!

4. Make the decision



I've decided
to take
Highway 5

5. Act on the decision

I'm on my way!



Think of decision-making as
following a road map...

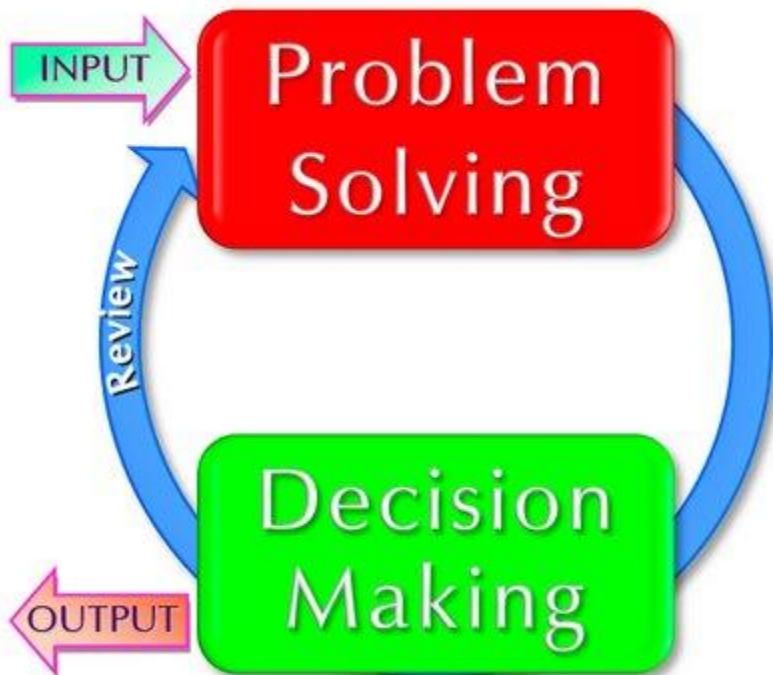
6. Evaluate the decision

I should have taken the interstate!



DECISION-MAKING & PROBLEM-SOLVING...

**‘Decision-making’
and
‘problem-solving’
are closely linked.**



Making a decision is an integral part of the problem-solving process. The decision is the ‘result’ or ‘action’.

USE DECISION-MAKING SKILLS TO SOLVE PROBLEMS...

Got a problem?

Finding a solution to your problem can be compared to trying on a variety of hats. You need to think through the pros and cons of each option.



Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by observation, experience, reflection, reasoning, values, or communication... and serves as a guide to belief and action. It is the basis of problem-solving.

PRACTICE PROBLEM-SOLVING...

Suppose your niece Carly has muscular dystrophy. This is a degenerative disease. She is already in a wheelchair and is losing control of her hands and arms. She has retained her mental ability. It is her birthday next week; she'll be 6 years old. You normally get her a gift that costs between \$10-20. What will you get her this year?



1. What decision needs to be made?
2. List all your options...at least 3-5 if possible.
3. Write the pros and cons of each option. You may need to do some research on costs, etc.
4. Make the decision!
5. How would you take "action"?
6. The look on Carly's face will help you evaluate your decision!

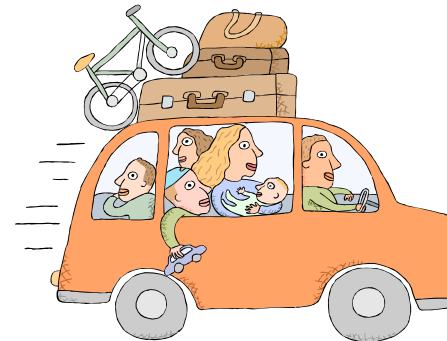
PRACTICE PROBLEM-SOLVING...

John and Sue met “on line” and want to get married right away. John lives in Grand Island where his job is located. He works long hours, often 10-12 hour days, but makes really good money and it is the perfect locally-owned company for him to perhaps own some day. Sue lives in Omaha, with her mother and near her job as a nurse at the Orthopedic Hospital. She loves her job and has finally built up enough seniority that she works only on weekdays with weekends off. Sue’s mother is nearly 90 years old. Mother is in poor health and needs Sue for companionship and to run errands for her, clean, cook, etc. Mother has lived in this house her entire life, attends her life-long church regularly with Sue, and has a close circle of friends that do call on her occasionally. She says she can’t leave her home, but can’t live without Sue either. John and Sue have a problem.



PRACTICE PROBLEM-SOLVING...

You're moving to California! There are just no jobs in Nebraska, and it just makes sense that you move to California where jobs are plentiful. You have an old car, 2 suitcases, and just enough money to pay for gas for the 4 day trip. You have room for yourself, 5 additional passengers and 5 more suitcases in the car. Choose your passengers from the list given, but *make sure you can justify your decisions based on human wants, needs, values, interests, and values.*






Question: Why is it so difficult to convince a classmate NOT to drop out of school?

Answer: The formal operational stage of thinking may not be fully developed until they are older, and they may not be able to understand consequences that they have not personally experienced yet.

Question: Mario truly values honesty. He is quick to tell you that he does not believe in cheating. When he was taking his college finals, however, he did cheat. Why?

Answer: While values influence decision-making, they do not control actions. When you make a decision against your values... you may not be as happy with that decision.

Reference and sources

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