Corporation for National & Community Service
Montana State Office

IN-SERVICE TRAINING

Learning Circle G:

ADDRESSING PROBLEM SOLVING

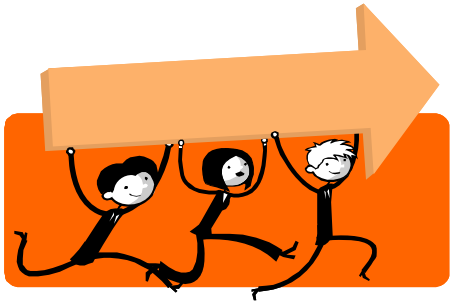
LC: ADDRESSING PROBLEM SOLVING
LEARNING OUTCOMES

As a result of this session, participants will be able to:

	Identify steps for achieving a joint problem-solving process.
	Discuss different creative problem-solving strategies.
	Describe how appreciative inquiry could be used in a community building process.

PROPOSED AGENDA:

1. **Learning Circle Set-Up**
   - ✓ Welcome, introductions
   - ✓ Session overview, packet, working agreements
2. **Joint Problem Solving**
3. **Creative Problem Solving**
4. **Appreciative Inquiry**
5. **Learning Circle Close-Out**
   - ✓ Summary of session, carry forward conversation
   - ✓ Transition to next session



JOINT PROBLEM-SOLVING FRAMEWORK

(Adapted from resource materials from Applied Theory and Practice Program, the Institute for Conflict Analysis and Resolution, George Mason University, Fairfax, Virginia.)

Getting Started	Joint Analysis	Decision-Making	Doing It
See an Issue Identify the Parties Think it Through Propose a Process ▪ Ground rules ▪ Logistics ▪ Timing	Mutual Education Create "We Knowledge" Jointly Define the Issues Re-Define the Process Generate Visions and Options	Create Criteria Apply Criteria Test Make Preliminary Choices Package Develop Implementation Plan	Present for Ratification or Adoption Prepare Renegotiation Monitor and Evaluate Enjoy the Rewards
Agree on Process	**Agree on Issues and Process**	**Agree on Plan**	**DONE!**

This model presents the stages and the information to be included in the joint problem-solving framework. The specifics of each framework will be determined by the characteristics of the specific conflict situation and the needs of the parties involved.

⇒ **Critical thinking + opportunity thinking allows for better problem solving**

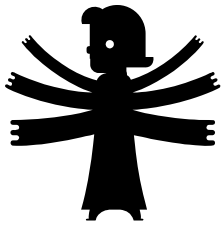
- **Much more abundant thinking – primary concept is parallel or lateral thinking**

Edward De Bono = Six Thinking Hats

Assignment #1 Instruction –

- Consider all the things you could and would do if …
  - **you had a third eye**

  - **Or, if you had a third arm**



Opportunity Thinking Question Cards

A. What if wars were settled by intellectual contests?

B. What if human hearing were twice as sharp?

C. What if everyone were assigned a career from birth?

D. What if looking at yourself in the mirror were outlawed?

E. What if every car were built to carry only one person?

F. What if people made a habit of running rather than walking from one place to another?

G. What if people could see better in the dark than the light?

H. What if everyone were trained in self-defense?

I. What if people's arms were twice as long as they are now?

Assignment #2 –

- Consider the following scenario

Scenario – There is a group and meeting to start an after-school program 1. 10 people at meeting 2. Participants represent various stakeholders and constituencies 3. Lots of ideas generated but meeting ends with no consensus or concrete plan

Instructions –

- First, reflect the scenario as an OPPORTUNITY THINKER
- Second, assess the meeting as a CRITICAL THINKER
- Third, reflect on the consequences of your thinking.

Thinking Like a Genius

The practice of genius ***(****Guide blog #****1)***

The first and last thing demanded of genius is the love of truth
Goethe

"Even if you're not a genius, you can use the same strategies as Aristotle and Einstein to harness the power of your creative mind and better manage your future."

The following eight strategies encourage you to think productively, rather than reproductively, in order to arrive at solutions to problems. These strategies are common to the thinking styles of creative geniuses in science, art, and industry throughout history.

1. **Look at problems in many different ways, and find new perspectives that no one else has taken (or no one else has publicized!)**
   Leonardo da Vinci believed that, to gain knowledge about the form of a problem, you begin by learning how to restructure it in many different ways. He felt that the first way he looked at a problem was too biased. Often, the problem itself is reconstructed and becomes a new one.

2. **Visualize!**
   When Einstein thought through a problem, he always found it necessary to formulate his subject in as many different ways as possible, including using diagrams. He visualized solutions, and believed that words and numbers as such did not play a significant role in his thinking process.

3. **Produce! A distinguishing characteristic of genius is productivity.**
   Thomas Edison held 1,093 patents. He guaranteed productivity by giving himself and his assistants idea quotas. In a study of 2,036 scientists throughout history, Dean Keith Simonton of the University of California at Davis found that the most respected scientists produced not only great works, but also many "bad" ones. They weren't afraid to fail, or to produce something mediocre to arrive at excellence.

4. **Make novel combinations. Combine, and recombine, ideas, images, and thoughts into different combinations no matter how incongruent or unusual.**
   The laws of heredity on which the modern science of genetics is based came from the Austrian monk Gregor Mendel, who combined mathematics and biology to create a new science.

5. **Form relationships; make connections between dissimilar subjects.**
   Da Vinci forced a relationship between the sound of a bell and a stone hitting water. This enabled him to make the connection that sound travels in waves. Samuel Morse invented relay stations for telegraphic signals when observing relay stations for horses.

6. **Think in opposites.**
   Physicist Niels Bohr believed that if you held opposites together, then you suspend your thought, and your mind moves to a new level. His ability to imagine light as both a particle and a wave led to his conception of the principle of complementarity. Suspending thought (logic) may allow your mind to create a new form.

7. **Think metaphorically.**
   Aristotle considered metaphor a sign of genius, and believed that the individual who had the capacity to perceive resemblances between two separate areas of existence and link them together was a person of special gifts.

8. **Prepare yourself for chance.**
   Whenever we attempt to do something and fail, we end up doing something else. That is the first principle of creative accident. Failure can be productive only if we do not focus on it as an unproductive result. Instead: analyze the process, its components, and how you can change them, to arrive at other results. Do not ask the question "Why have I failed?" but rather "What have I done?"

The practice of genius (Guide blog #1) Adapted with permission from: Michalko, Michael, ***Thinking Like a Genius: Eight strategies used by the super creative, from Aristotle and Leonardo to Einstein and Edison*** (*New Horizons for Learning*) as seen at http://www.newhorizons.org/wwart_michalko1.html, (June 15, 1999) This article first appeared in THE FUTURIST, May 1998

Michael Michalko is the author of ***Thinkertoys*** *(A Handbook of Business Creativity),* ***ThinkPak*** *(A Brainstorming Card Set), and* ***Cracking Creativity: The Secrets of Creative Geniuses*** *(Ten Speed Press, 1998).*

Appreciative Inquiry packet is located at end of this document