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Sekolah Tinggi Ilmu Ekonomi (STIE) La Tansa Mashiro**

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SURAT TUGAS

No. 89/LPPM-LT/X/2022

Yang bertandatangan dibawah ini, Direktur Lembaga Penelitian dan Pengabdian Kepada Masyarakat Sekolah Tinggi Ilmu Ekonomi La Tansa Mashiro Rangkasbitung, dengan ini menugaskan kepada :

Nama : Dr. Yumhi, ST., MM
NIDN : 0312127201
Jabatan : Dosen STIE La Tansa Mashiro

Untuk melaksanakan rangkaian Kegiatan Sebagai Pembicara dalam Kegiatan Seminar Umum pada Rabu 2 Oktober 2022 di Program Studi Pendidikan Biologi STKIP La Tansa Mashiro dengan Tema "Creative Thinking Skills".

Demikian surat tugas ini diberikan untuk dapat dilaksanakan dengan penuh tanggungjawab.

Rangkasbitung, 02 Oktober 2022

LPPM STIE La Tansa Mashiro

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SERTIFIKAT

No:238/D-1/STKIP-LTM/X/2018

Di Berikan Kepada :

Dr. YUMHI, S.T. M.M

Atas Partisipasinya Sebagai :

Pembicara

Dalam Kegiatan Seminar Umum pada Rabu 2 Oktober 2022 di Program Studi Pendidikan Biologi STKIP La Tansa Mashiro dengan Tema " *Creative Thinking Skills*"

Ketua

Program Studi Pendidikan Biologi



Jajang Miharja, M. Pd

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Creative Thinking Skill

Dr. Y u m h I, ST,MM

STKIP La Tansa Mashiro

CREATIVE PROCESS

RESEARCH

DESIGN

INSPIRATION

VISION
& IDEAS

BRAIN
STORM

THINKING

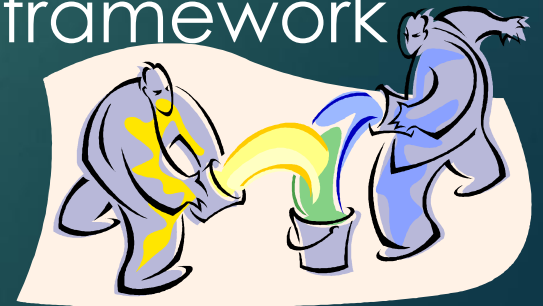
Calvin & Hobbs On Creativity



How many of us really understand creative thinking?

Critical versus Creative Thinking

- ▶ They are not the same, but are closely linked
- ▶ Critical thinking is the active and systematic process of communication, evaluation, reflection and analysis, meant to foster understanding, solve problems, support sound decision-making and guide action
- ▶ Creative thinking synthesizes intuition, sensations, memories and feelings such that they can take on a reality that can be tested within a critical thinking framework



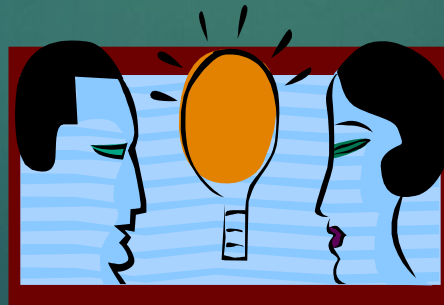
Nature of the Relationship



- ▶ You can be a critical thinker without being a creative thinker!
- ▶ You cannot be a creative thinker without being a critical thinker!

What is Creative Thinking?

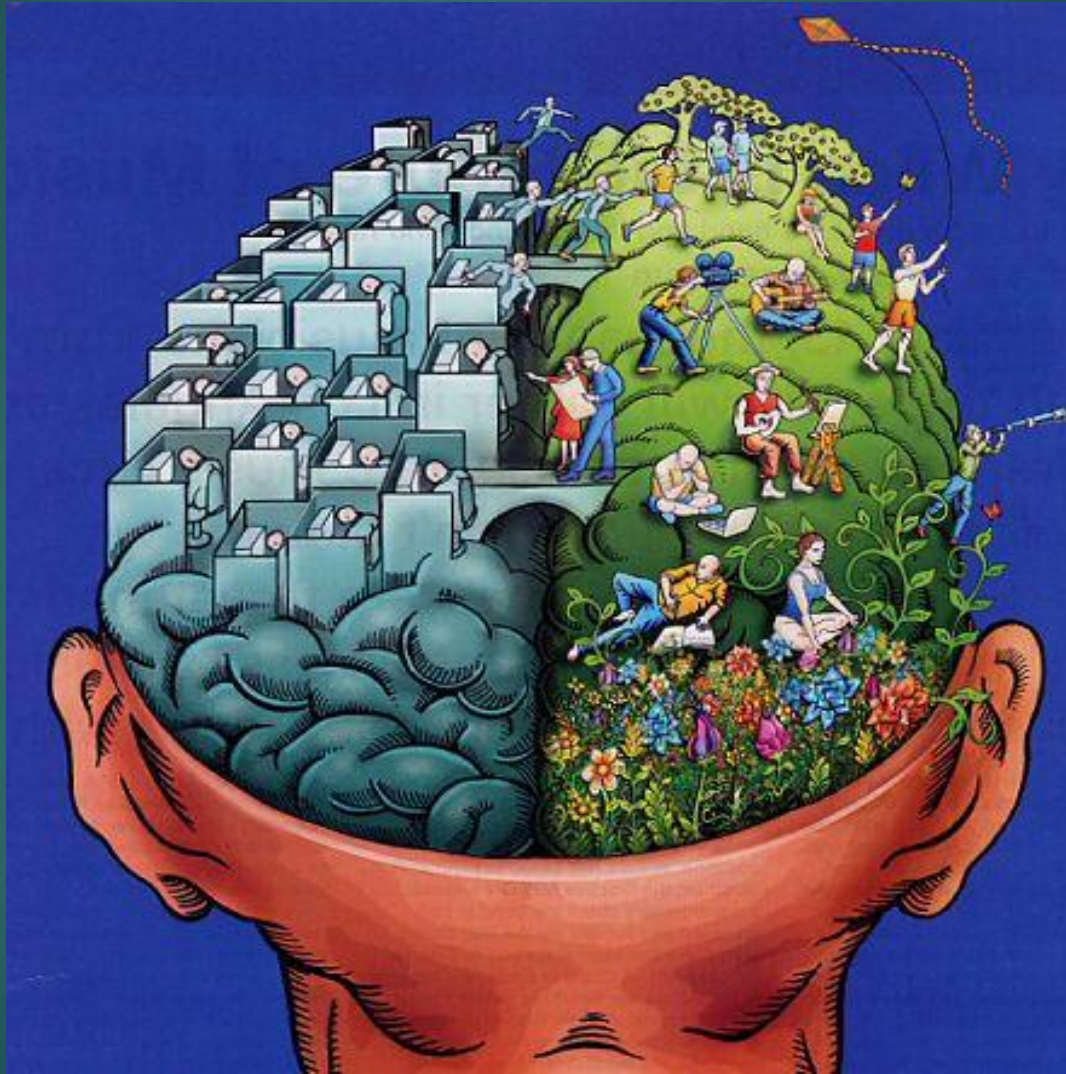
- ▶ The ability to imagine or invent something new
- ▶ The ability to generate new ideas by combining, changing, or reapplying existing ideas
- ▶ The attitude to accept change and new ideas, a willingness to play with ideas and possibilities, a flexibility of outlook (Harris, 1998)



Left Brain versus Right Brain

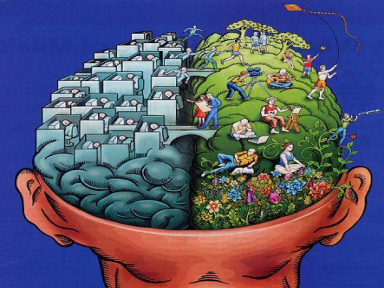
Left:
language
math
writing
science
facts
logic
convergence

**Critical
Thinking**



Right:
Intuition
artistic
musical
insightful
imagination
3D images
divergence

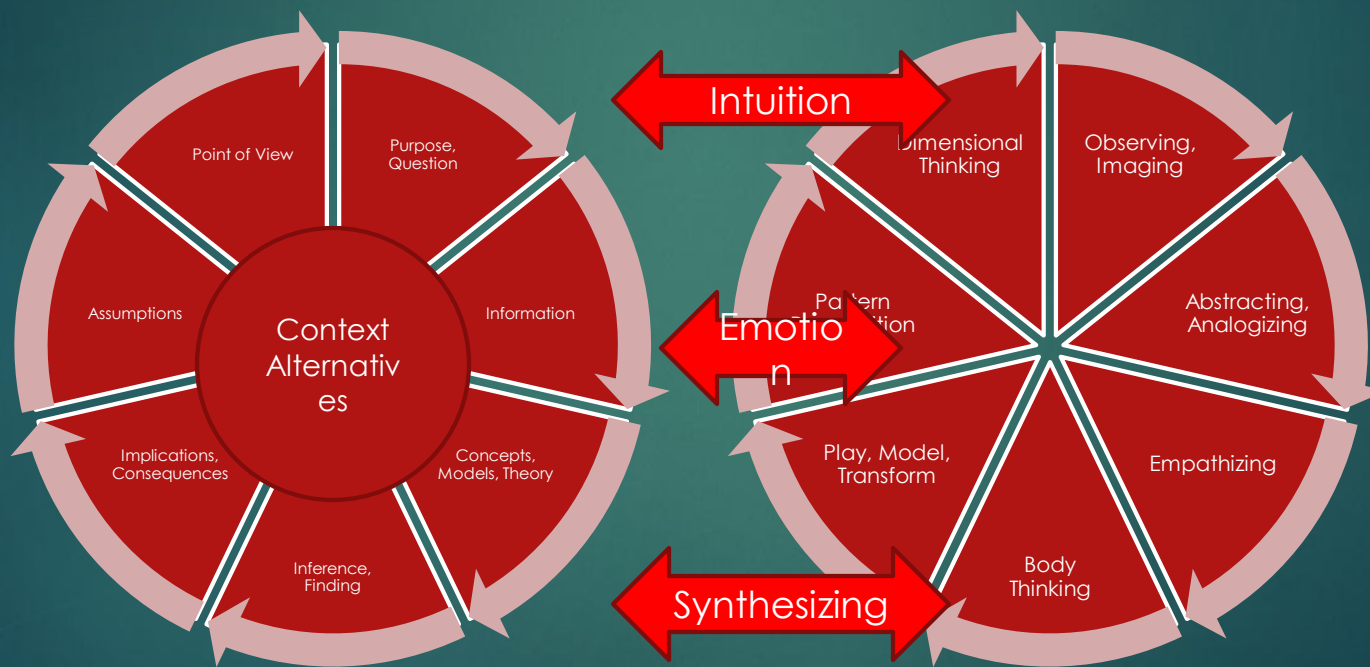
**Creative
Thinking**



Thinking Processes

Critical Thinking Elements

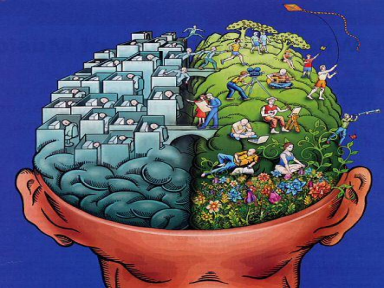
Creative Thinking Elements



Convergence

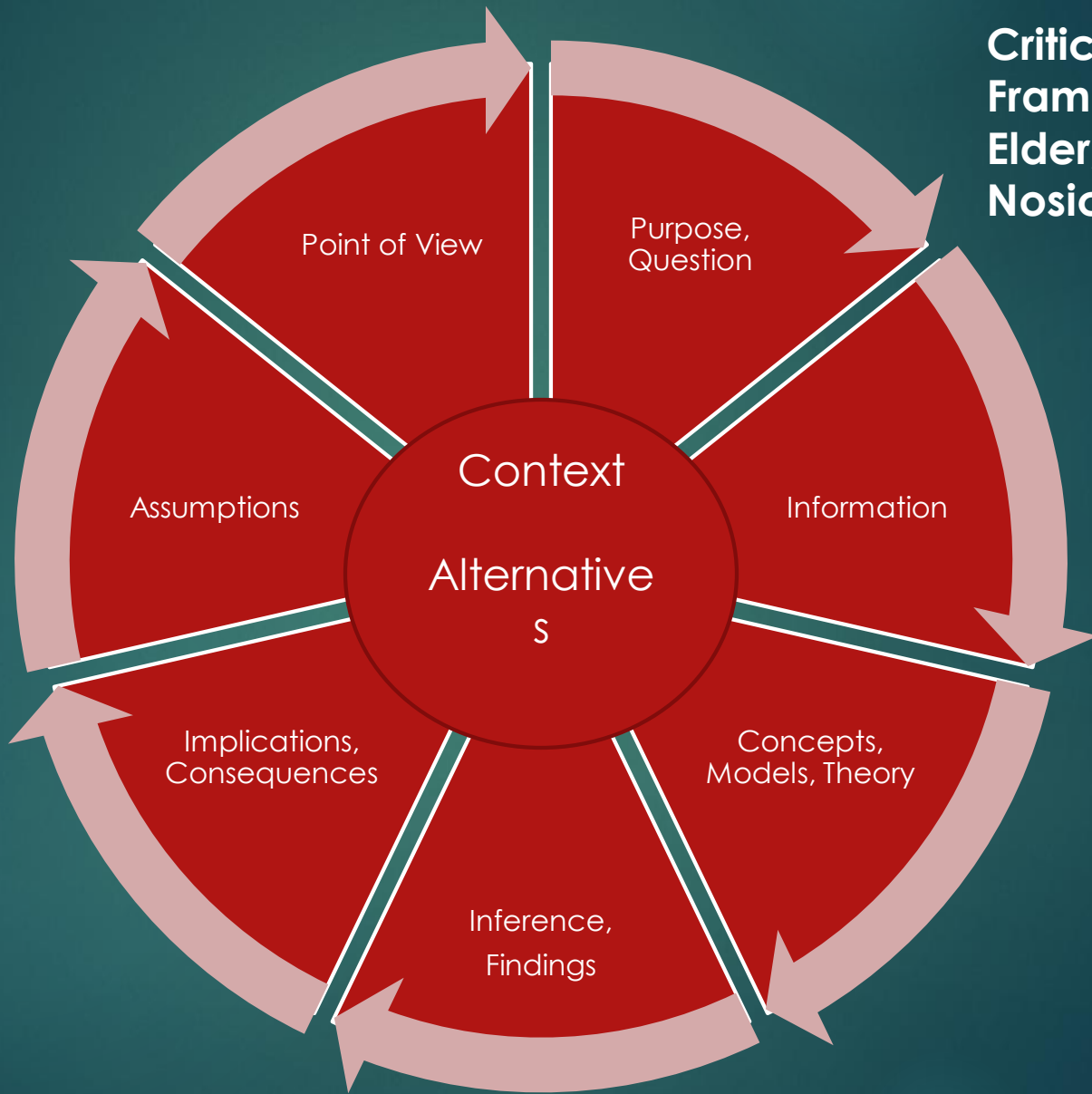
Approaches to Thinking

Divergence

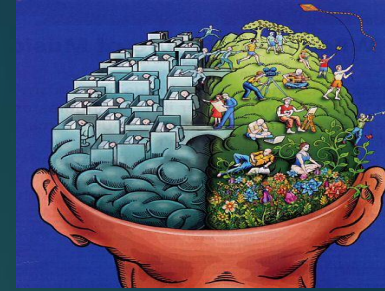


Left Brain

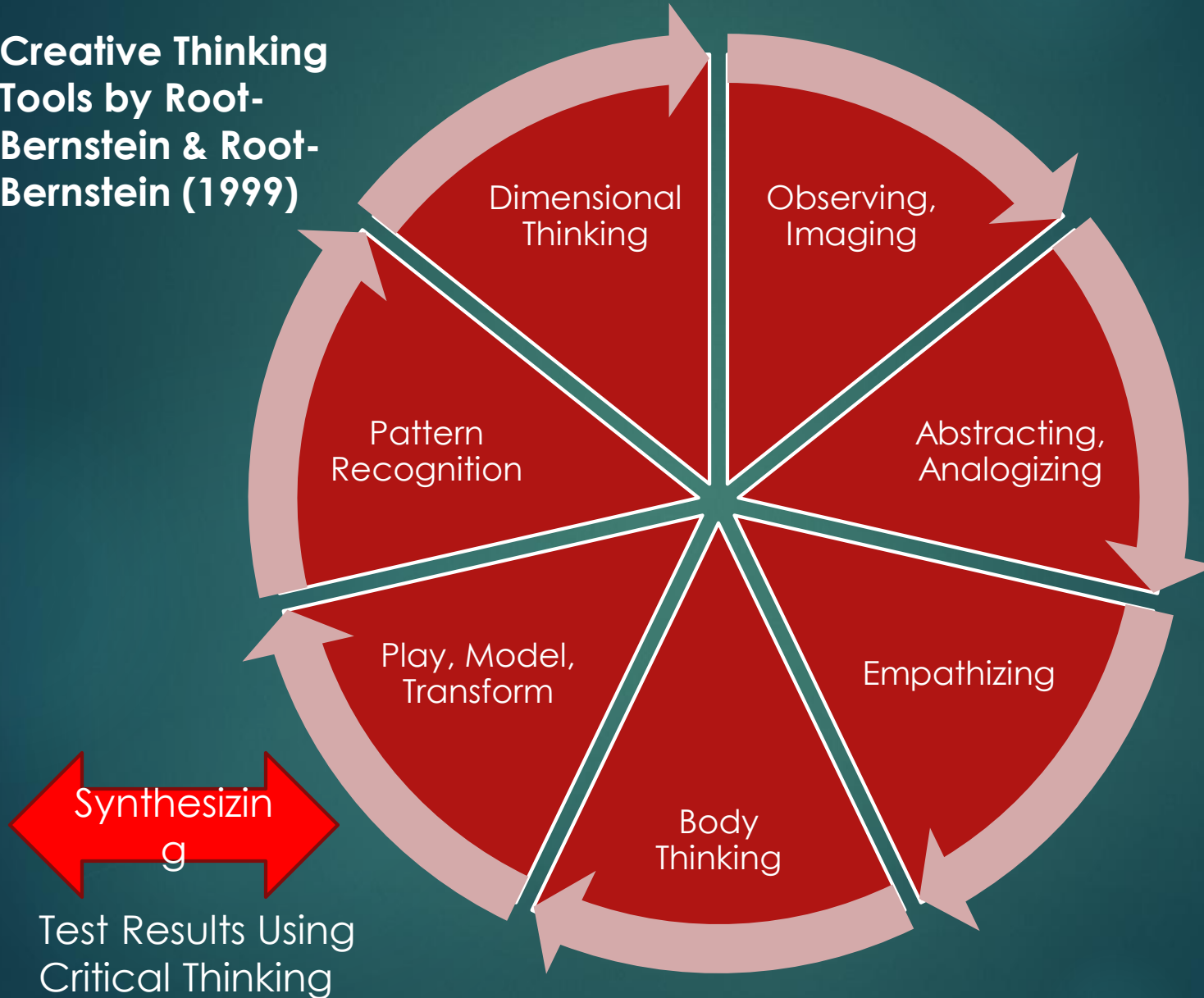
Critical Thinking Framework of Elder, Paul & Nosich



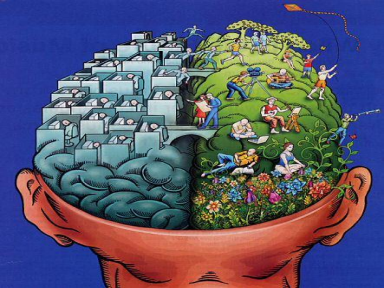
**Creative Thinking
Tools by Root-
Bernstein & Root-
Bernstein (1999)**



Right Brain



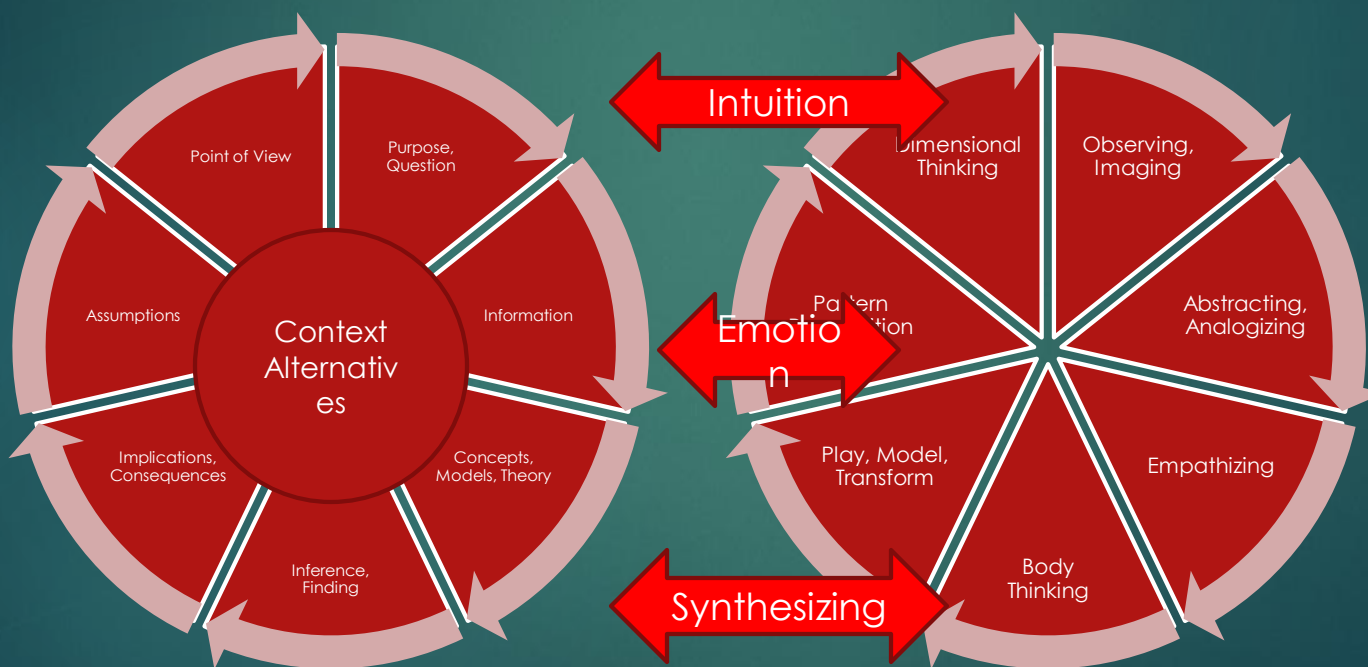
Synthesizing
Test Results Using
Critical Thinking



Thinking Processes

Critical Thinking Elements

Creative Thinking Elements



Convergence

Approaches to Thinking

Divergence

Creative Thinking in Homeland Security and Emergency Management

- ▶ The purpose of creative thinking is to solve a problem or answer a question.
- ▶ Creative thinking can be used in any area of Homeland Security and Emergency Management.



Examples of Creative Thinking and Possible Uses in HS & EM

- ▶ Emergency Management: How to convince law enforcement to be more acceptant of incident command system?
- ▶ Infrastructure Protection: How to get private sector infrastructure owners to take security more seriously?
- ▶ Border & Immigration Control: How to reduce illegal entry of people, goods, etc., along US land and maritime borders?
- ▶ Intelligence Support to HS: How to ensure a better flow of information to Fusion Centers from local (county, city, tribal) sources?

Creativity Potential: Fusion Centers & TATs

- ▶ Tactical Analysis Teams (TATs) of 2-3 analysts with IC IT connectivity were deployed to US Embassies in Central America in the 1980s to provide U.S. national level intelligence to support local counter-insurgency operations.
- ▶ The first counter-drug (CD) TAT was employed to US Embassy Bogota in 1990 to prepare target packages for Colombian National Police and Military assaults on drug trafficking infrastructure.
- ▶ From 1994-1996 TATs (analysts and IC connectivity) were deployed to US Embassies and US Consulate Barranquilla, CO, in the Caribbean and Latin America as a means to overcome stove-piping of CD intelligence and improve both in-country and offshore intelligence support.
- ▶ TAT system greatly increased inter-agency trust, reduced stove-pipes, and over time led to a doubling of offshore cocaine interdiction quantities (50 tons /year 1990s, 100 tons/year now).
- ▶ How can we use the TAT concept to improve the flow of information to Fusion Centers from local (county, city, tribal) sources?

Kentucky Fusion Center

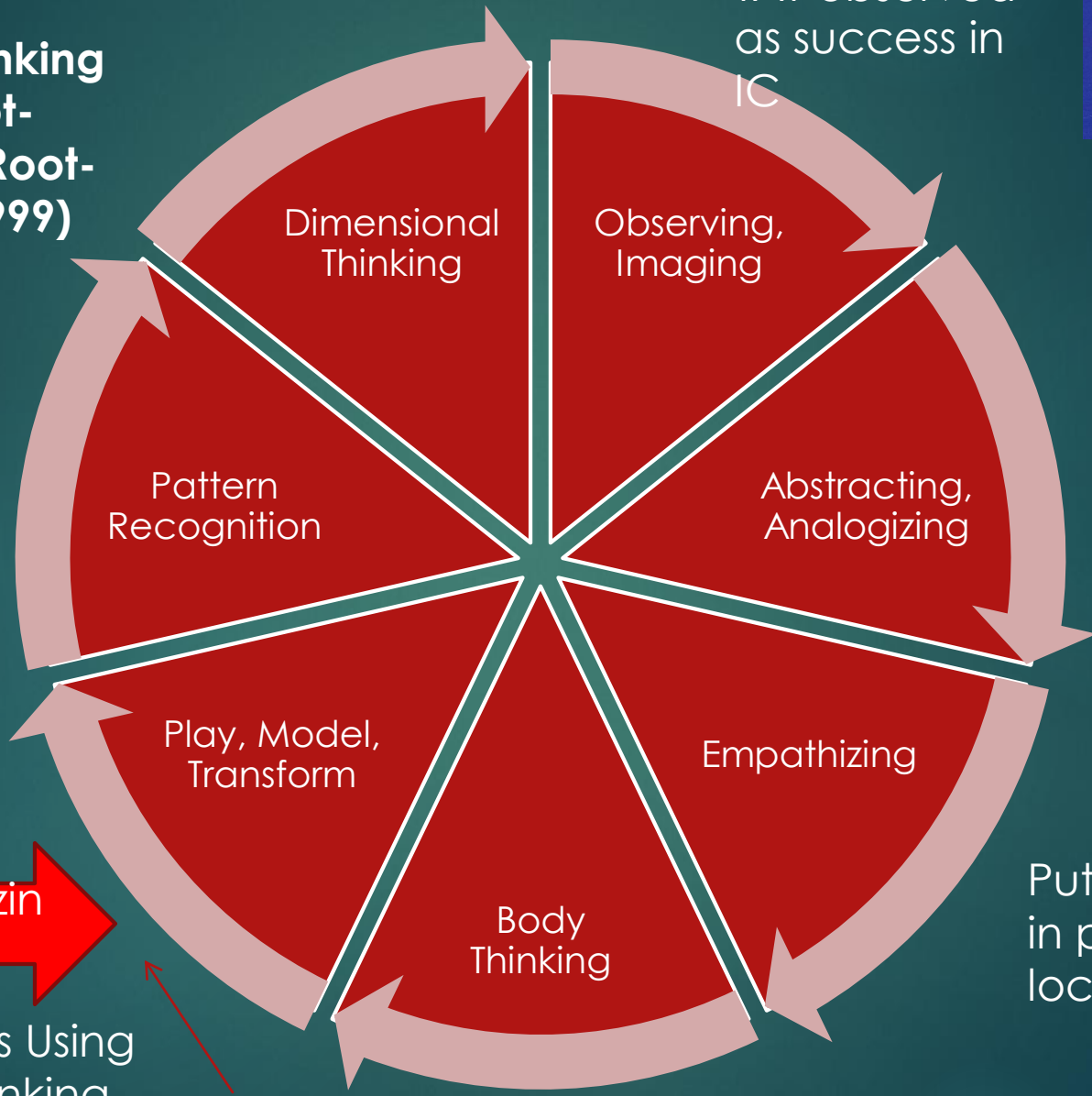


- ▶ No automatic connectivity exists between KY local jurisdictions to share information.
- ▶ There is no standard reporting system except FBI major crimes reports.
- ▶ Severe distrust exists between local authorities and state/federal authorities.
- ▶ With connectivity and standard reporting, TATs (1-2 analysts) in 16 Kentucky State Police posts and larger city PDs could collect (by interviews with local law enforcement) and report data to Fusion Center on threats in state.

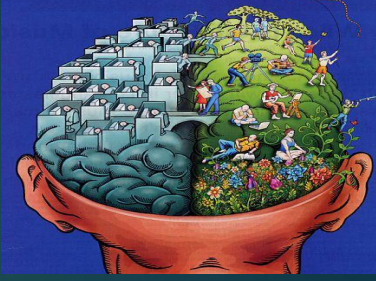
Creative Thinking Tools by Root-Bernstein & Root-Bernstein (1999)

Lack of information sharing based on same reasons

Synthesizing
Test Results Using Critical Thinking



TAT observed as success in IC



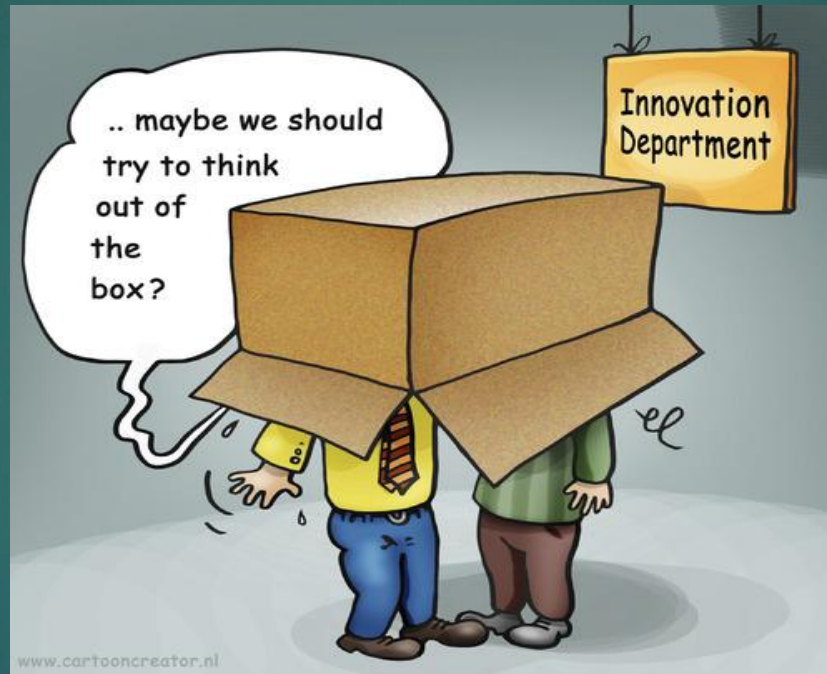
Right Brain

TAT success in IC could be model for Fusion Centers

Put yourself in place of local LE

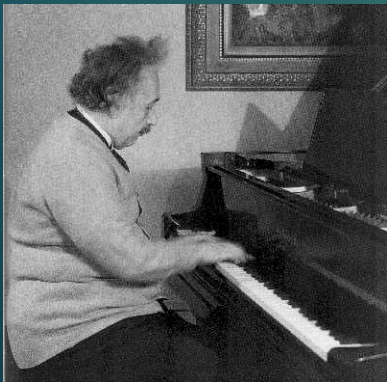
Develop Model and SOPs and Test

How to Improve Creativity?



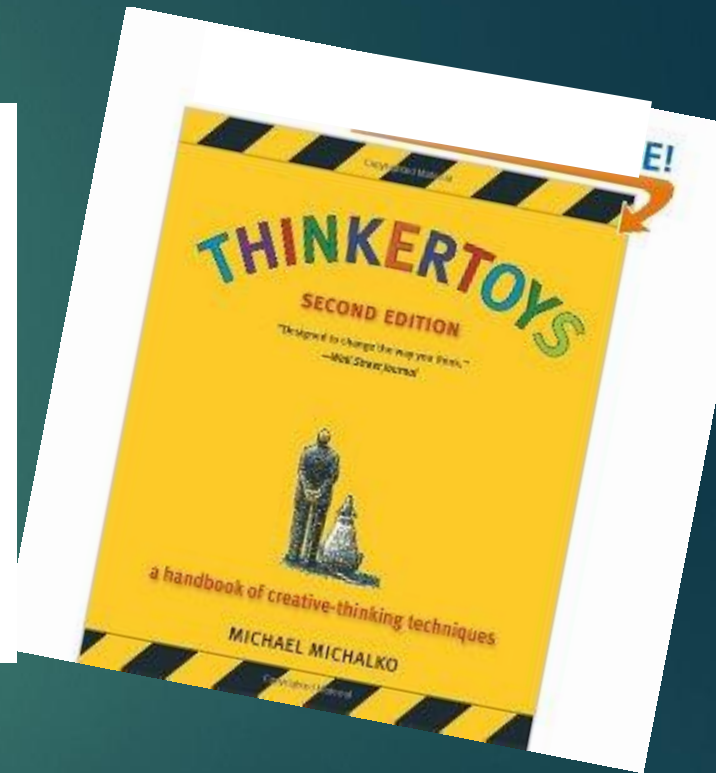
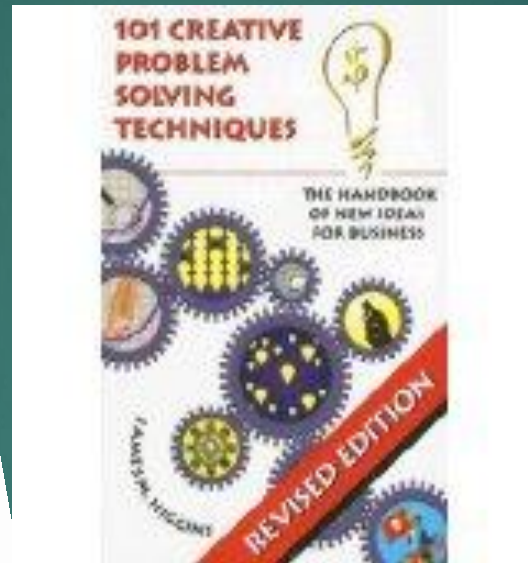
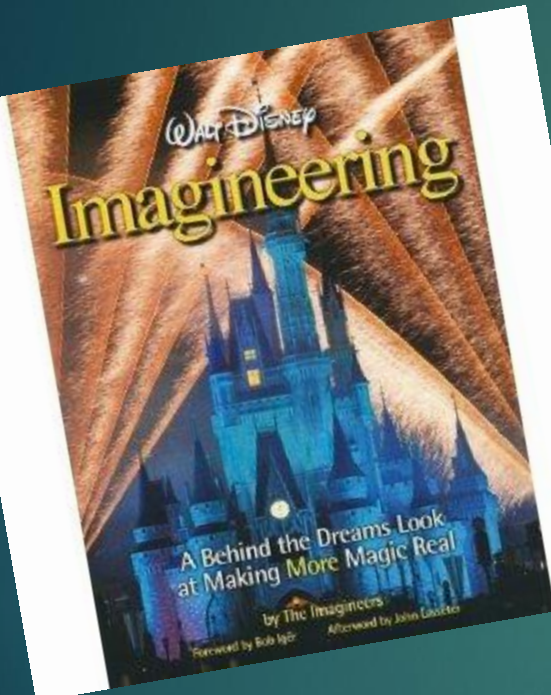
How to Improve Creativity? (cont.)

- ▶ Learn more about critical and creative thinking elements and processes—become meta-cognitive
- ▶ Expand your knowledge base beyond your discipline, e.g., obtain a liberal arts degree, take courses in disciplines outside your specialty, start a hobby outside your specialty
- ▶ Practice, practice, practice



Einstein was not just a Physicist, but also an accomplished Musician & Sailor

How to Improve Creativity? (cont.)



A Number of Books on Creative Thinking are Available

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