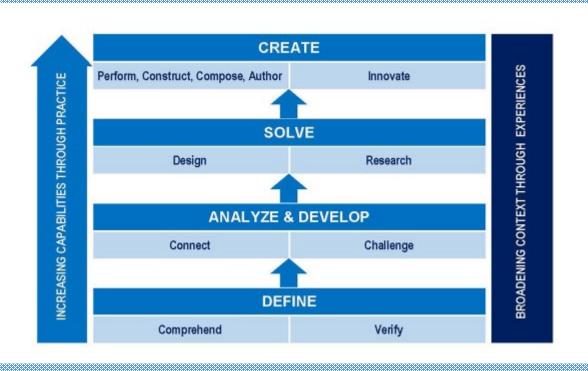
# Agenda: (this is a tour, not an immersion!)

- Critical Thinking for Conflict, Recovery & Resilience
- Critical Thinking across Difference
- Creating a Team Project & Driving Success

# Critical Thinking for Conflict, Recovery & Resilience

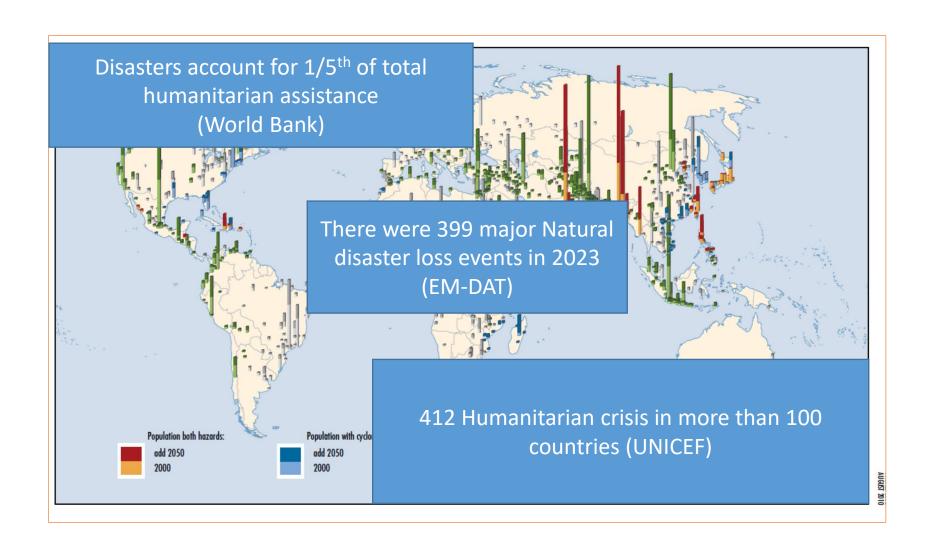
# RIT's Applied Critical Thinking ladder:



# JAZZ:

- Improv method *improves*Improvisation relies on
  experience/practice!!!
- Experience brings capability

# Crisis driven thinking....



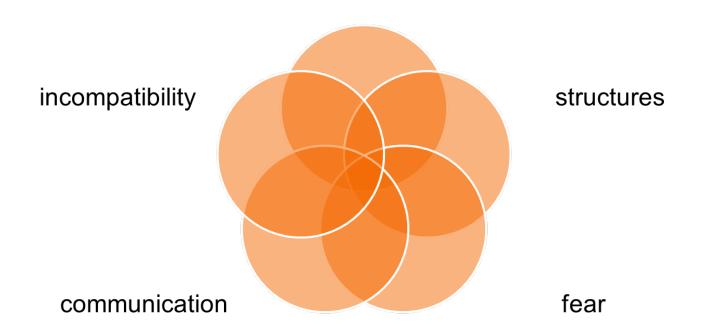
# **Probability and Consequences**

"Disasters are, by their nature <u>low probability--high consequence</u> events", but there is a big space between everyday life and disaster....this is the *opportunity space* where we can prepare & mitigate through knowledge of aspects, impacts, capacity & capability for better decision-making.

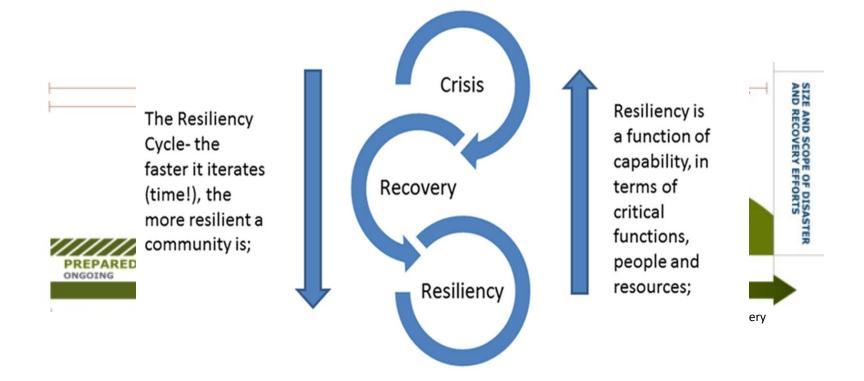




# resources



# **Disaster & Emergency Management**



Criticality is defined by both action & output–under a time constraint!

Romanowski & Schneider "Critical infrastructure protection and risk analysis in the mid-size city" IEEE HST 2013

# Emergency management metrics

# **Emergency Management Metrics**

# Level 1 Existence of reactive EMP Designated accountability for EMP No scheduled review of EMP

### Level 2

EMP reactively mitigates hazards

Review of incident response

EMP review scheduled with stakeholders Continuity plans tested

### Level 3

EMP examines areas of vulnerabilities and specific areas of concern

EMP reviewed after each incident

Data is managed and utilized for planning in policy and operation

### Level 4

Tracking and trending of emergency response

Reporting of results
beyond response
organizations

Integration of vulnerabilities into planning beyond EM

Formal review of EMP every 1-3 years

### Level 5

EMP incorporates resiliency grounded in analysis of historical & predictive data

EM has voice at high level governing planning opportunities

Proactive continuous improvement

Annual review of EMP & proactive integration of EMP in community policies & plans



# Building a Local Resilience Management System

# COMMUNITY RESILIENCE OFFICER vs. EMERGENCY MANAGER

# **Emergency Manager**

### Manager of local emergency management agency

Role: Manage local EM through cooperation with agencies and create local emergency plans that include prevention/mitigation, readiness, response, and recovery

**Objective**: Minimize city vulnerabilities to hazards and put appropriate measures in place to prepare for unexpected situations

Funding: DHS/ FEMA, state & local programs

# **Chief Resilience Officer**

# Collaboration **Opportunities**

Build local assets that can be leveraged to prevent/mitigate, prepare for, respond to, and recover from unexpected events

CROs can integrate emergency management into the city's resilience strategy

CROs and EMs can leverage efforts to foster community resilience

### Top level advisor that reports to the mayor

Role: Create a resilience strategy for the city through collaboration with multiple departments and community members. Integrate resilience into all departments

**Objective:** Shape a city that will thrive and mitigate vulnerability to hazards

Funding: 100RC

# **Driving Continuous Improvement**

# **EMERGENCY MANAGEMENT FRAMEWORK EXAMPLE**

### Goal

Make cities and human settlements inclusive, safe, resilient and sustainable



## **Relevant Targets**

- · Reduce deaths and people affected and substantially decrease the direct economic losses caused by disasters with a focus on protecting the poor and people in vulnerable situations
- · Increase cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement holistic disaster risk management at all levels

### **Relevant Indicators**

- Deaths, missing persons and directly affected persons attributed to disasters per 100,000 population
- Direct economic loss attributed to disasters in relation to GDP
- · Adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030
- Local governments adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies

# RESILIENCE-SUSTAINABILITY MANAGEMENT SYSTEM **CROSSOVER**



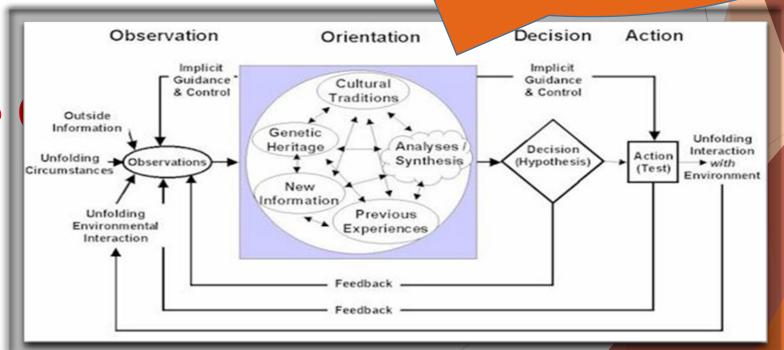


Crisis Leadership depends on:

- ► Situational awareness
- **▶** Control
- **▶** Capacity
- ▶ Resilience
- **▶**Within the

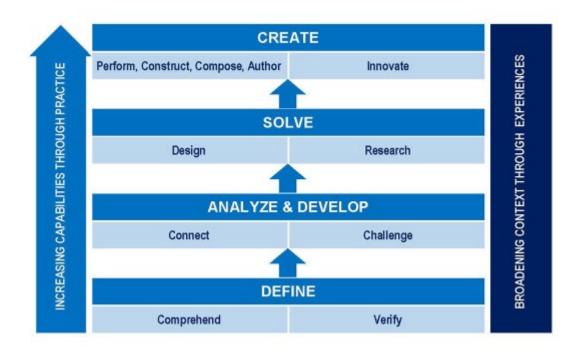
(Crisis) Decision-making is driven by:

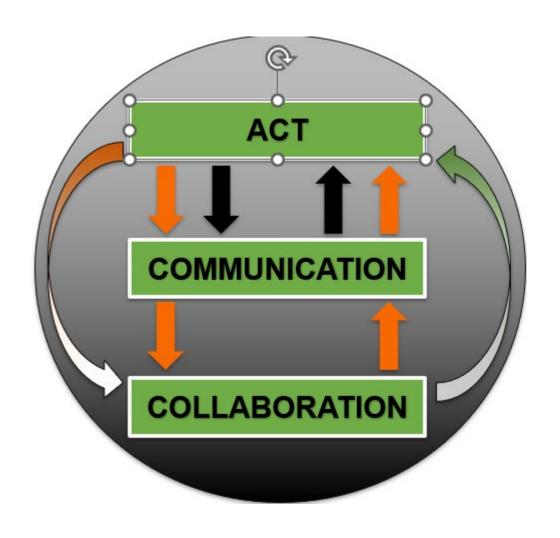
- Context & Experience
- Practice & Learning
- Open mind, lack of preconceptions
- The self! Own it!



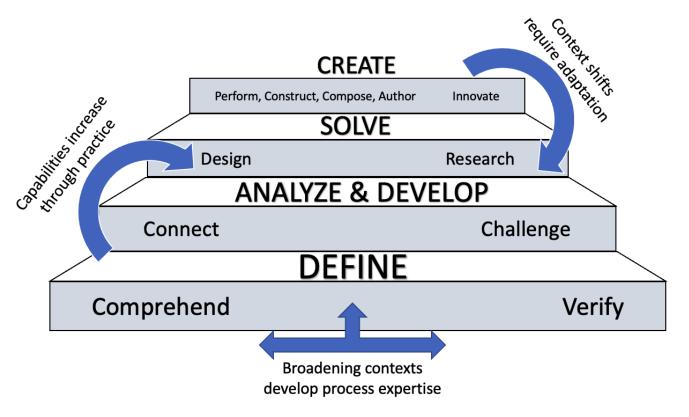
# Critical Thinking across Difference

# **Difference- Disconnect??**

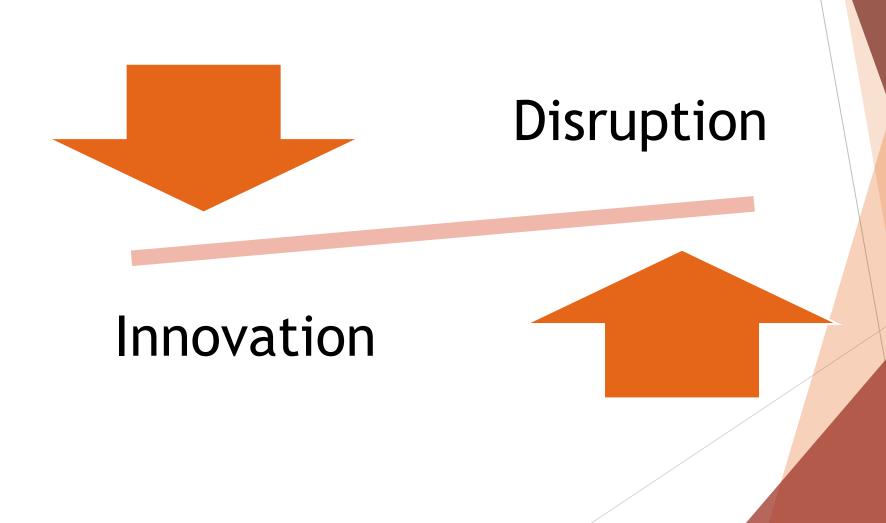




# ACT Pivoting \*another look at critical thinking development



# Change as opportunity:



# Creating a Team Project & Driving Success

- Information Literacy/Evaluate Quality/Robustness: Trust
- Use information effectively/point of view: Storytelling
  - Solve Problem: Reframing (Complexity)
  - Innovate/Create/Improvisation

**Finding Your Path** 

# **Team Construction:**

- Information/ Trust: What about? Can you tell me? I don't understand...
- The Story: How do we understand this? Summarize
- Solve: IMPACT/IMPORTANCE

   Can we reframe (pull) with other information?
- Create: Innovate and Collaborate

# Tips!

- Define interest & scope [Expectations: rules of engagement too!]
- Analyze & Develop shared understanding
- Solve [how do we define success??]
- Create the final product [iterate & explain]

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# **Driving Continuous Improvement**

# **EMERGENCY MANAGEMENT FRAMEWORK EXAMPLE**

### Goal

Take urgent action to combat climate change and its impacts



### **Relevant Targets**

- Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
- · Integrate climate change measures into national policies, strategies and planning
- Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

### **Relevant Indicators**

- Deaths, missing persons and directly affected persons attributed to disasters per 100,000 population
- Adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030
- Adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies
- Communicate establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production
- Integrate mitigation, adaptation, impact reduction and early warning into primary, secondary and tertiary curricula
- Communicate the strengthening of institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions

# **Driving Continuous Improvement**

# DISASTER/EMERGENCY MANAGEMENT FRAMEWORK EXAMPLE

### Goal

· End poverty in all its forms everywhere



### **Relevant Targets**

 Build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters

### **Relevant Indicators**

- Deaths, missing persons and directly affected persons attributed to disasters per 100,000 population
- Direct economic loss attributed to disasters in relation to GDP
- Adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030
- Local governments adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies

### Goal

• Ensure healthy lives and promote well-being for all at all ages



### **Relevant Targets**

- Increase health financing and the recruitment, development, training and retention of the health workforce
- Strengthen the capacity for early warning, risk reduction and management of national and global health risks

### **Relevant Indicators**

- · Health worker density and distribution
- International Health Regulations (IHR) capacity and health emergency preparedness

# Leveraging Local Capability for Global Change

# ISO 37101: SUSTAINABLE CITIES AND COMMUNITIES

### **OBJECTIVES**

- Manage sustainable development and community resilience
- Improve contribution of community to sustainable development and resilience
- Assess performance

### **PURPOSES**

- Attractiveness
- Preservation and improvement of environment
- Resilience

- Responsible resource use
- Social cohesion
- Well-being

### **ACTION AREAS**

- Governance, empowerment and engagement Economy and sustainable production and
- Education and capacity building
- Innovation, creativity and research
- Health and care in the community
- Culture and community identity
- Living together, interdependence and mutuality

- Economy and sustainable production and consumption
- Living and working environment
- Safety and security
- Biodiversity and ecosystem services
- Community smart infrastructure
- Mobility